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1972 MSMS Annual Session • Detroit • Oct. 1-5

Michigan Medicine

OFFICIAL JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY • VOLUME 71, NUMBER 20 • JULY, 1972

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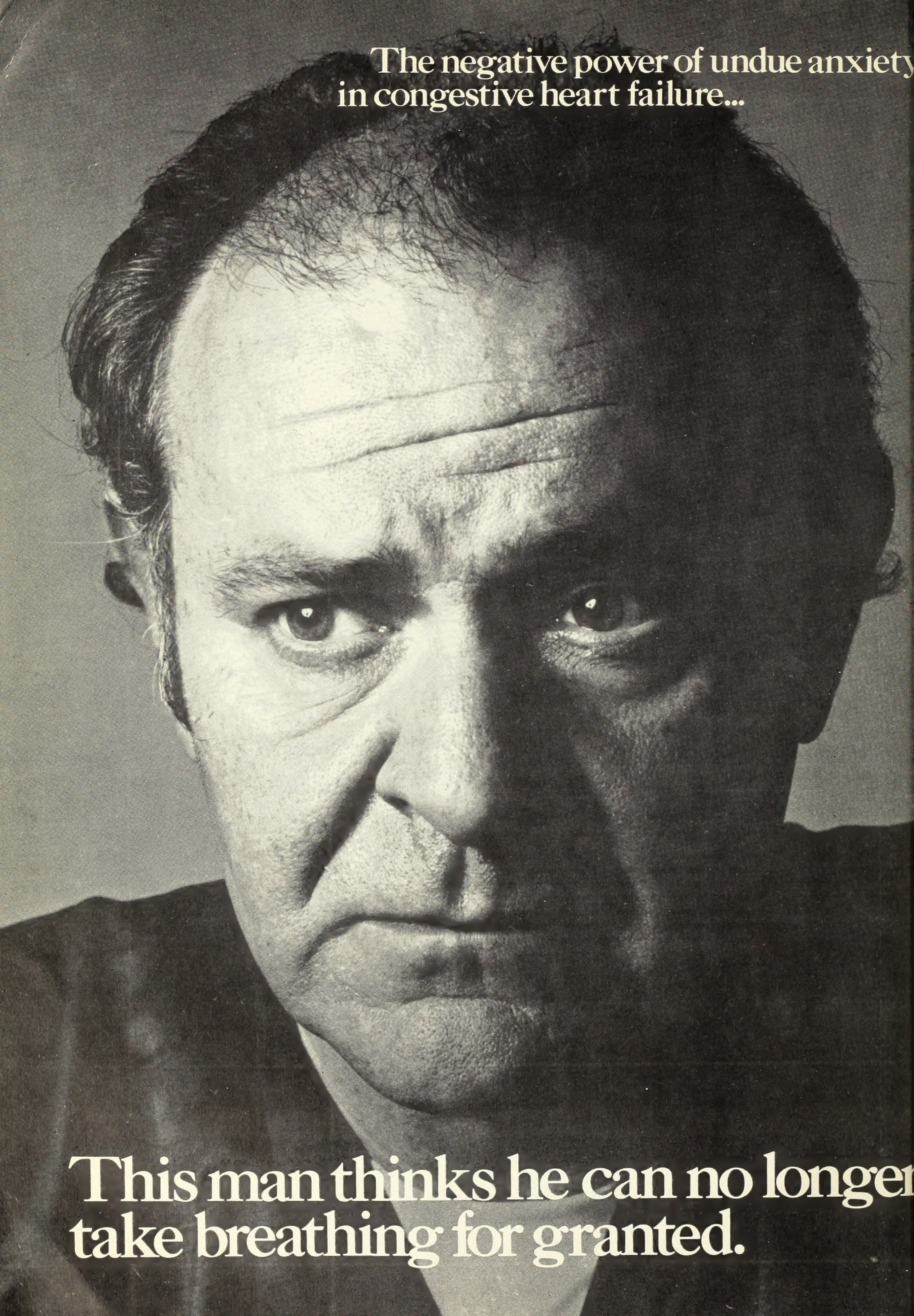
In this issue:

- Outline program—1972 MSMS Annual Session
- Explanation: Emergency Health Personnel Act
- Michigan Medical Students in SAMA-MECO program — where they are and their numbers

Michigan physicians are urged
to intensify anti-smok[illegible] beginning this month.

282655

See page 649 for pull-out "Thank you for not smoking" sign for the doctor's office.


The negative power of undue anxiety
in congestive heart failure...
This man thinks he can no longer
take breathing for granted.

Typical of many patients with congestive heart failure, he also suffers from severe anxiety, a psychic factor that may influence the character and degree of his symptoms, such as dyspnea. His apprehension may also deprive him of the emotional calm so important in maintenance therapy.

Aid in rehabilitation
Specific medical and environmental measures are often enhanced by the antianxiety action of adjunctive Libritabs (chlordiazepoxide). Libritabs can also facilitate treatment of the tense convalescent patient until antianxiety therapy is no longer required. Whereas in geriatrics the *usual daily dosage* is 5 mg two to four times daily, the *initial dosage* in elderly and debilitated patients should be limited to 10 mg or less per day, adjusting as needed and tolerated.

Concomitant use with primary agents
Libritabs is used concomitantly with certain specific medications of other classes of drugs, such as cardiac glycosides, diuretics, antihypertensives, vasodilators and oral anticoagulants, whenever excessive anxiety or emotional tension adversely affects the clinical condition or response to therapy. Although clinical studies have not established a cause and effect relationship, physicians should be aware that variable effects on blood coagulation have been reported very rarely in patients receiving oral anticoagulants and chlordiazepoxide HCl.

The positive power of Libritabs® (chlordiazepoxide)

5-mg, 10-mg, 25-mg tablets

t.i.d./q.i.d.

up to 100 mg daily

for severe anxiety accompanying congestive heart failure

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Indicated when anxiety, tension and apprehension are significant components of the clinical profile.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Supplied: Tablets containing 5 mg, 10 mg or 25 mg chlordiazepoxide.

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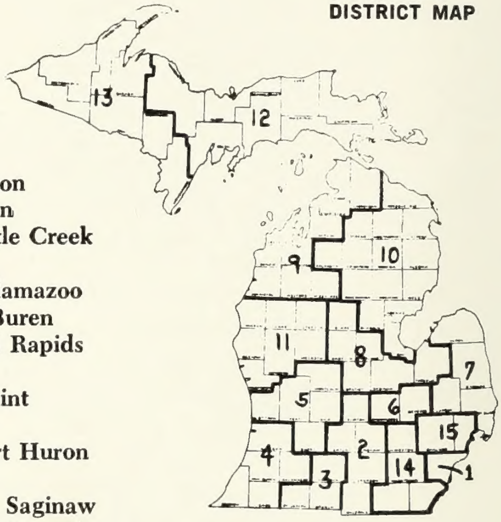
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Doctor Mozen seeks answers to malpractice problem

To the editor:

In a recent issue of the *Michigan Medicine Medigram,* there is a note indicating that the Michigan State Medical Society Council authorized Johnson and Higgins, a national insurance brokerage firm, to investigate, on an exclusive basis, the possibility of professional liability insurance program for consideration.

At the present time, my coverage is by Lloyds of London and is costing me $15,000 per year.

As you well imagine, this is a crushing burden and any possibility of relief would be most appreciated.

Can you tell me, at this time, if there has been any progress in the investigation by the Johnson and Higgins Corporation as suggested?

It seems to me that there is something basically wrong with our insurance laws when there is assigned risk for every other type of liability that one can think of. An automobile driver may have an accident every day of the week and yet one of the companies doing business in Michigan must accept him in their pool. The same thing applies to businessmen, who may have many robberies, fires, etc. Homeowners can get coverage regardless of how many claims, how many fires, how many breakins, etc. they may have.

Only the doctor, who may have unfortunately had some bad experience with malpractice claims is left out in the cold. The malpractice insurance companies can reject, for any reason or no reason, any applicant. It seems to me that legislative remedies could be found for this really bad situation.

If you have any suggestions, which could possibly be of help, I would be most appreciative.

Respectfully and very sincerely yours,
Herschel E. Mozen, MD

Editor's note:

The report from Johnson and Higgins is expected at the midsummer meeting of The Council, and it will be given top priority. In the meantime, the MSMS advisors to the Joint Legislative Study Committee on Medical Malpractice are studying assigned risk pools and other long-range solutions to be considered by the committee and the legislature.

AMA department pleased with reporting

To the editor:

The article in *Michigan Medicine* regarding "How Medical Students Are Being Taught" has been brought to my attention.

We are pleased to see the report of the AMA Department of Undergraduate Medical Education get this kind of publicity with such good reporting.

Glen R. Leymaster, MD, Director
AMA Dept. of Undergraduate
Medical Education

N. C. doctor seeks information on biting insects

To the editor:

I am compiling case reports of allergic reactions to biting insects, i.e., mosquitos, fleas, kissing bugs, bed bugs, gnats and flies—including horsefly, sandfly, deerfly. I am also interested in reactions to fire ants.

I would like physicians to supply me with case reports of those patients who have had reactions to such insects. Include in your reports, the history of the type of reaction and complications if any; the immediate treatment; if desensitization was attempted, what were the results? Send to:

Claude A. Frazier, MD
4-C Doctors Park
Ashville, N.C. 28801

Sincerely,
Claude A. Frazier, MD

MSU SAMA chapter thanks MSMS

Warren F. Tryloff, Director
Michigan State Medical Society
East Lansing, Michigan

Dear Sir,

On behalf of the Student American Medical Association Chapter at Michigan State University I wish to acknowledge and express our thanks for the financial aid given to us at this time. It is through such contributions that our organization can continue to develop meaningful programs for medical student participation. Among the locally active programs sponsored by our organization are the Vaccination Clinic, Drug Education Center, MECO project, attendance at various health profession conferences throughout the year, the new Lansing Free Clinic, and attendance at the SAMA National Meetings. Again, thanks for the help your organization has been giving us at MSU.

Respectfully
Mark S. Ishimaru, President, MSU-SAMA
Off-Campus Chairman

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Publication of **Michigan Medicine** is under the direction of the Publication Committee, Michigan State Medical Society. The scientific editor is responsible for the scientific content. The managing editor is responsible for the production, correspondence and contents of the journal. He and the executive editor share final responsibility of the entire publication.

Neither the editors nor the state medical society will accept responsibility for statements made or opinions expressed by any contributor in any article or feature published in the pages of the journal. In editorials, the views expressed are those of the writer and not necessarily official positions of the society.

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1. Address scientific manuscripts to the Publication Committee, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. Submit original, double-spaced typewritten copy and two carbon copies or photo copies on letter size (8½ x 11 inch) paper. On page one, include title, authors, degrees, academic titles, and any institutional or other credits.
2. Authors are responsible for all statements, methods, and conclusions. These may or may not be in harmony with the views of the Editorial Staff. It is hoped that authors may have as wide a latitude as space available and general policy will permit. The Publication Committee expressly reserves the right to alter or reject any manuscript, or any contribution, whether solicited or not.
3. Illustrations should be submitted in the form of glossy prints or original sketches from which reproductions will be made by **Michigan Medicine**.
4. Articles should ordinarily be less than four printed pages in length (3000 words).
5. References should conform to *Cumulative Index Medicus*, including, in order: Author, title, journal, volume number, page, and year. Book references should include editors, edition, publisher, and place of publication, as well.
6. The editors welcome, and will consider for publication, letters containing information of interest to Michigan physicians, or presenting constructive comment on current controversial issues. News items and notes are welcome.
7. It is understood that material is submitted for exclusive publication in **Michigan Medicine**.

MICHIGAN MEDICINE is the official organ of the Michigan State Medical Society, published under the direction of the Publication Committee. Published three times a month, except four times in December and January, 38 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Mich. and at additional mailing offices. Yearly subscription rate, $9.00; single copies, 80 cents. Additional postage: Canada, $1.00 per year; Pan-American Union, $2.50 per year; Foreign, $2.50 per year. Printed in USA. All communications relative to manuscripts, advertising, news, exchanges, etc., should be addressed to Judith Marr, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. Phone Area Code 517, 337-1351. © 1972 Michigan State Medical Society.

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Since sulfonylureas promote the release of nsulin which is lipogenic and helps transport glucose into adipose tissue...

And since many overweight patients already have normal or high levels of endogenous insulin, why not consider DBI-TD?

It lowers blood sugar without stimulating insulin secretion from the pancreas. And this may be important to the dieting diabetic.

In adult-onset, nonketotic diabetics uncontrolled by diet alone...

DBI-TD® Geigy
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ndications: Stable adult diabetes mellitus; sulfonylurea failures, primary and secondary; adjunct to nsulin therapy of unstable diabetes mellitus.
Contraindications: Diabetes mellitus that can be regulated by diet alone; juvenile diabetes mellitus that is uncomplicated and well regulated on nsulin; acute complications of diabetes mellitus (metabolic acidosis, coma, infection, gangrene); during or immediately after surgery where nsulin is indispensable; severe hepatic disease; renal disease with uremia; cardiovascular collapse (shock); after disease states associated with hypoglycemia.
Warnings: Use during pregnancy is to be avoided.
Precautions: 1. *Starvation Ketosis:* This must be differentiated from "insulin lack" ketosis and is characterized by ketonuria which, in spite of relatively normal blood and urine sugar, may result from excessive phenformin therapy, excessive insulin reduction, or insufficient carbohydrate intake. Adjust insulin dosage, lower phenformin dosage, or supply carbohydrates to alleviate this state. **Do not give insulin without first checking blood and urine sugar.**
2. *Lactic Acidosis:* This drug is not recommended in the presence of azotemia or in any clinical situation that predisposes to sustained hypotension that could lead to lactic acidosis. To differentiate lactic acidosis from ketoacidosis, periodic determinations of ketones in the blood and urine should be made in diabetics previously stabilized on phenformin, or phenformin and insulin, who have become unstable. If electrolyte imbalance is suspected, periodic determinations should also be made of electrolytes, pH, and the lactate-pyruvate ratio. The drug should be withdrawn and insulin, when required, and other corrective measures instituted immediately upon the appearance of any metabolic acidosis.
3. *Hypoglycemia:* Although hypoglycemic reactions are rare when phenformin is used alone, every precaution should be observed during the dosage adjustment period particularly when insulin or a sulfonylurea has been given in combination with phenformin.
Adverse Reactions: Principally gastrointestinal; unpleasant metallic taste, continuing to anorexia, nausea and, less frequently, vomiting and diarrhea. Reduce dosage at first sign of these symptoms. In case of vomiting, the drug should be immediately withdrawn. Although rare, urticaria has been reported, as have gastrointestinal symptoms such as anorexia, nausea and vomiting following excessive alcohol intake.
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For complete details, including dosage, please see full prescribing information.

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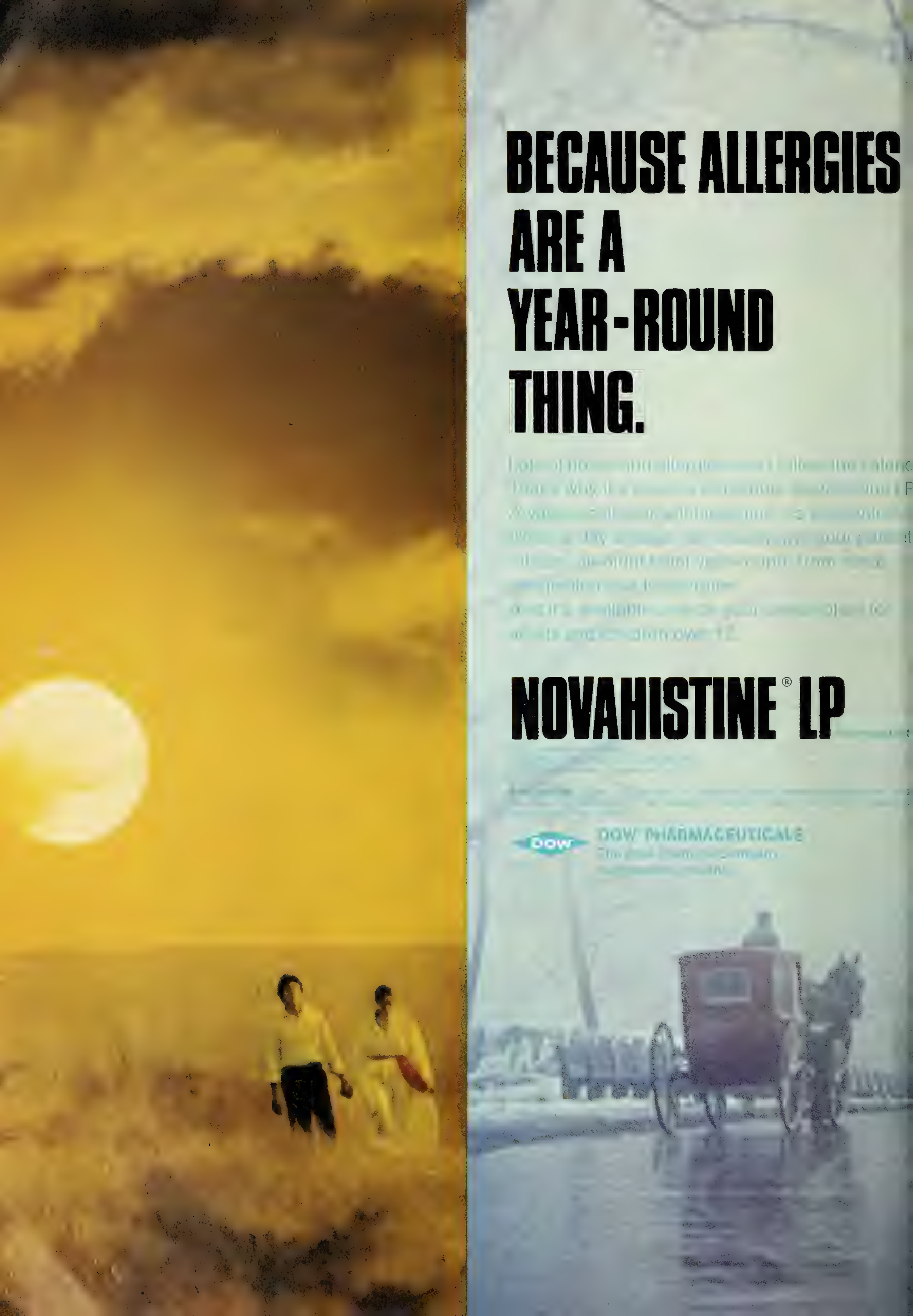
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[illegible] adults and children over 12.

MSMS in the news

Shall PG study be mandatory? Task Force ponders

"Recognition of the size and complexity of the problem of keeping the American physician up-to-date has led to new and important activities in the field of continuing medical education."

That assessment from the AMA's Washington office describes the reason for the existence of the current MSMS Ad Hoc Task Force on Continuing Medical Education, chaired by Robert J. Mason, MD, Birmingham. Doctor Mason was MSMS president in 1969-70.

The committee was charged by MSMS 1971 House of Delegates Resolution 7 to review a recommendation by the MSMS Postgraduate Education Committee for a program of continuing medical education requirements for reregistration. The task force is to make its report at the 1972 MSMS House of Delegates meeting.

Under Doctor Mason's leadership, the committee has received written expression of its members' views on continuing education as a requirement. They have discussed whether continuing education should be voluntary or mandatory, the type of program suitable to Michigan and the availability of continuing education courses for Michigan physicians.

They are studying the continuing education programs of 12 state medical societies and specialty groups, including four in which continuing education is a membership requirement, two with continuing education as a relicensure requirement and three with voluntary programs.

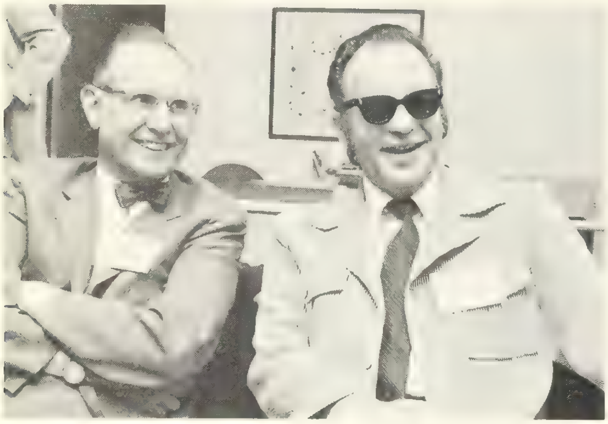
Members of the committee are Robert T. Blackhurst, MD, Midland; Louis E. Heideman, MD, Birmingham; Cecilia Hissong, MD, Dearborn; Hilliard Jason, MD, East Lansing; Conrad Lam, MD, Detroit; W. Kaye Locklin, MD, Kalamazoo; Richard Pomeroy, MD, Lansing; Donato Sarapo, MD, Adrian; Edward J. Tallant, MD, Detroit, and Neal A. Vanselow, MD, Ann Arbor.

"I think this is one of the most important things organized medicine in Michigan has tackled in recent years," says Doctor Mason. "Because while most doctors are interested in their educational development, some have maintained the status quo since graduation from medical school.

"We feel that if we in organized medicine don't upgrade ourselves or maintain high standards that government may step in. We are exploring avenues for maintaining and upgrading a program to assure proficiency in present-day medical education."

An MSMS Ski Club is being formed for interested members. Preliminary plans call for charter flights west to ski resorts, with post-graduate education opportunities available. Those interested are to write to: Thomas Berglund, MD,
MSMS Headquarters, Box 950,
East Lansing 48823.

Around the table at the first meeting of the MSMS Task Force on Continuing Medical Education were, clockwise from left, W. Kaye Locklin, MD, Kalamazoo; Robert T. Blackhurst, MD, Midland; Conrad Lam, MD, Detroit; Neal A. Vanselow, MD, Ann Arbor; Richard W. Pomeroy, MD, Lansing; Donato F. Sarapo, MD, Adrian; Hilliard Jason, MD, East Lansing; and, backs to camera, Robert J. Mason, MD, Birmingham, chairman, and Sherry Hall, MSMS staff liaison.



Informal meetings between MSMS members and Michigan legislators are on the increase at the sponsorship of MSMS staff. One such meeting took place recently at MSMS Headquarters between the Michigan Senate Appropriations Subcommittee on Medicaid and the doctor-constituents of the subcommittee members. The eight physicians and six legislators enjoyed dinner and discussion of the medical schools, Medicaid and the shortage of physician services. Among those present, were, from left, top left, Sen. Gary Byker, Hudsonville, and George Smit, MD, Holland; Charles Oppy, MD, Roscommon, and Sen. John Toepp, Cadillac, top right; Donald Anderson, MD, Kingsford, and Sen. Joseph Mack, Ironwood, bottom left, and James Gibbons, MD, Flint and Sen. Garland Lane, Flint, bottom right.

Freeway motorists now will see hospital signs

In response to requests from the Michigan State Medical Society, the Michigan Highway Department is taking steps to erect directional signs on freeways to help motorists find hospitals with continuous emergency medical care.

Hospitals which meet the requirements may send their requests to the appropriate district traffic and safety engineer. "He will review the request and, if all the criteria are met, take the necessary steps to provide the requested signs," reports H. H. Cooper, state engineer of traffic and safety.

Minimum requirements have been established by the Michigan Highway Department, whose officials have conferred several times with the Michigan State Medical Society. The medical society first filed its requests for such signs with the highway department in July, 1970. Recent efforts were advanced by Donald R. McCorvie, MD, Williamston, chairman of the MSMS Committee on Rural Medical Service.

To qualify, the requesting hospital must "be located within five miles of the interchange, provide continuous service with emergency care, have a doctor on duty 24 hours per day and seven days per week, be licensed by the Michigan Department of Public Health, and be located on the intersecting crossroad or be trailblazed by other signs leading to the hospital."

The hospital signs will be placed on urban or rural freeways.

Procedures to erect these signs on freeways meet federal requirements, state officials explain. The signs, which will be reflective, will carry the word, "Hospitals" and will be in keeping with other signs for "Gas", "Food", "Lodging", and "Camping."

You get just about the same headroom and legroom in an Audi 100 LS as you do in a Rolls-Royce Silver Shadow.

The Audi isn't a very big car. On the outside.

But don't let that fool you about the size of the car on the inside.

You'll find there's more headroom than you'd ever expect. Enough for, say, a person 6'6". And if he's got unusually long legs (which a person of his size usually has) he won't have to sit clutching his knees. Because there's more legroom than you'd ever expect.

Mind you, he's not the only one who would sit comfortably. The Audi can seat a family of five rather nicely.

Now the Rolls-Royce isn't the only great car the Audi has a lot in common with.

The Audi has rack-and-pinion steering just like the Ferrari 512 racing car. And front-wheel drive just like the Cadillac Eldorado.

The Audi has the same type of brakes as the Porsche 917 racing car. And the same amount of trunk space as the Lincoln Continental.

Our interior looks so much like that of the Mercedes-Benz 280SE, you can hardly tell them apart.

And as for service, you'll get the same kind of expert service a Volkswagen gets. Because a Porsche Audi dealer is part of the VW organization.

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Official Call

The Michigan State Medical Society will convene in Annual Session in Detroit, Michigan, Oct. 1-3, 1972. The provisions of the Constitution and Bylaws and the Official Program will govern the deliberations.

Sidney Adler, MD, *President*
Brooker L. Masters, MD, *Council chairman*
Vernon V. Bass, MD, *Speaker*
James D. Fryfogle, MD, *Vice Speaker*
Attest: Kenneth H. Johnson, MD, *Secretary*

Your Passport to Progress

The 107th Annual Session
of the Michigan State Medical Society
Oct. 1 - 5, the Sheraton Cadillac Hotel, Detroit

Outline program

Sunday, Oct. 1

9:00 a.m. *Council breakfast*
4:00 p.m. *Registration*
Stenographers' Office opens
Communications Center opens
5:00 p.m. *News Room opens*
5:30 p.m. *Medical Student Delegation Dinner*
7:00 p.m. *Hospitality Room opens*
8:00 p.m. *First Session, House of Delegates*

Monday, Oct. 2

7:00 a.m. *Washtenaw County Delegates' breakfast*
8:00 a.m. *Registration*
Stenographers' Office opens
News Room opens
Hospitality Room opens
Communications Center opens
8 a.m. to
5:00 p.m. *Set up of exhibits*
8:30 a.m. *Second Session, House of Delegates*
Noon *Fifty-Year Awardees' luncheon*
Genesee County delegates' luncheon
MDPAC Congressional luncheon
6:00 p.m. *Past Officers' Committee dinner*
8:30 p.m. *Third Session, House of Delegates*

Tuesday, Oct. 3

8:00 a.m. *Registration*
Stenographers' Room opens
News Room opens
Hospitality Room opens
Communications Center opens
8 a.m. to
5:00 p.m. *Set up of exhibits*
Noon *Luncheon meeting, Michigan Chapter, American College of Emergency Physicians*
1:00 p.m. *Fourth Session, House of Delegates*
2 to 5 p.m. *"Anatomy and Physiology of a Community Hospital Medical Staff"*
3 to 5 p.m. *"Grief and the Dying Patient" MSMS Committee on Medicine and Religion*
6:00 p.m. *Speaker's Reception and Grand Opening to the Exhibit (Oktoberfest) for all members, delegates and registrants, followed by*
7:00 p.m. *Installation dinner*
Exhibitors' party
8:00 p.m. *Installation of MSMS President*
Fifth Session, House of Delegates

Wednesday, Oct. 4

Concurrent Scientific Sessions, 9 a.m. to noon

Surgical Scientific Program

Medical Practical Program, *"The Diagnosis and Treatment of Degenerative Joint Disease"*

Concurrent Luncheons

"Immunological Deficiency Diseases"

"Win a few, lose a few" (Industrial Psychiatry)

"Abnormalities in Cyclic AMP Metabolism in Psoriasis"

Concurrent Postgraduate Courses, 2 to 5 p.m.

"Fainting"

"Strategies in the Diagnosis and Management of Patients with Recurrent Chest Pain"

Concurrent Meetings of Sections and Specialty

1 to 3 p.m. *"The Natural History and Practical Management of Renal Vascular Hypertension"*
2-3:30 p.m. *"Office Diagnosis of Gynecological Malignancy and A Current Look at Delivery Room Care"*
2-3:15 p.m. *"Low Back Pain—A Syndrome"*

2-3:30 p.m. *"Sexual Counseling and Family Counseling - Attitudes and Techniques Useful to the Family Physicians"*
3 to 5 p.m. *"Immunology and Diseases of the Digestive Tract"*
3:45-5 p.m. *"Management of Malignant Disease of Accessory Nasal Sinuses"*
4 to 5 p.m. *"Clinical Consequences of Environmental Abuse"*

Thursday, Oct. 5

Concurrent Scientific Sessions, 9 a.m. to noon

Medical Scientific Program

Surgical Practical Program, *"Psychological Dilemmas of Mutilating Surgery"*

Concurrent Luncheons

Pathology Section and Michigan Society of Pathologists

Thoracic Surgery Section
"The Management and Reconstruction Aspects of the Upper Third of the Face" (Plastic Surgery)

Postgraduate Course, 2 to 5 p.m.

"Surgical Approaches to Coronary Disease"

Concurrent meetings of Sections and Specialty

10 a.m. - Noon *"Saphenous Aorto-Coronary Bypass, Prosthetic Valve Implantation, Braunwald-Cutter Prosthesis, Bacterial Endocarditis, Anterio Mediastinotomy, Trachea Resection, Acquired Tracheal Stenosis"*
1:30 p.m. *"Non-neoplastic Diseases of the Lung"*

2-3:15 p.m. *"Immunizations—1972"*
"Multiple Sclerosis: Why, How, Now and When?"
3 to 5 p.m. *"Dyslexia"*
4 to 5 p.m. *"Anesthetic Management of the Patient with Increased Intracranial Pressure"*
6:00 p.m. *"Drug Abuse: Historical and Neurophysiological Aspects,"* followed by dinner

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Scientific papers

The mechanism by which female hormones enlarge collateral arteries

By Martin D. Jaffe, MD
Paul W. Rowe, MD
Bay City

The reason premenopausal females are protected from myocardial infarction and death as compared to age-matched males has never been adequately explained. Increased collateralization induced by female sex hormones is one of the possible methods by which protection is afforded. This paper explains physiological mechanisms underlying collateral enlargement and suggests the method by which female hormones enhance collateralization.

Any artery may become a collateral when it is anatomically favorably situated to assume part or all of the blood flow previously conducted through a vessel whose lumen has subsequently become partially or totally occluded. Increased collateral flow is induced as a consequence of decreased pressure distal to the obstruction. Thus a collateral artery experiences "high flow" when it distributes to the vascular bed previously served by the obstructed artery, in addition to its own vascular bed. The main physiological difference between an artery when it acts as a collateral and when it does not, is that it carries increased flow during collateral function.

In any artery, wall distention by intraluminal pressure is opposed by smooth muscle, elastin and collagen. Increased smooth muscle tone tends to constrict the artery whereas decreased tone allows for greater distention by intraluminal pressure. Vascular smooth muscle tone is regulated by chemical, neurogenic, and myogenic factors. There is no evidence that new chemical or neurogenic factors are activated in an artery that has assumed collateral function.

In collateral arteries, as well as in other high flow states—e.g., anemia, post ischemic hyperemia, and A-V fistula formation—high flow dilatation is brought about by a common mechanism.[1] The decreased peripheral resistance leading to increased blood outflow results in a drop in mean pressure.[1] It is this decrease in mean pressure, detected as tension, (Tension = Pressure × Radius) that is monitored by the artery's smooth muscle. The mechanism of detection is via the myogenic reflex. Bayliss pointed out[2] that arterial smooth muscle responds to stretch by contraction and reacts to diminution of tension by relaxation. Therefore, when mean arterial pressure drops, smooth muscle tone also decreases. In as much as lumen size is determined by an interaction of intraluminal pressure tending to distend and smooth muscle tone tending to constrict the artery, the resulting artery size will depend upon the interplay of these two factors. Thus during high flow the mean distending pressure is decreased and smooth muscle tone is also decreased. Whether or not dilatation actually occurs will depend upon the quantity of smooth muscle and its change in tone. If there were no smooth muscle in the artery wall, then decreasing mean pressure would result in constriction of the artery. But as the quantity of smooth muscle in a particular artery increases, the potential for dilatation also increases. That is, with smooth muscle hypertrophy there should be a greater range of vasodilatation and constriction[3] controlled by changes in smooth muscle tone.

As high flow continues, dilatation progressively increases.[4,5] When high flow is terminated, dilatation slowly regresses.[5] These characteristics of high flow dilatation are due to a creep phenomenon.[5] Creep (retarded deformation) and creep recovery are slowly acting characteristics of blood vessel wall characterized as "slow plastoelastic extension."[6] Dynamically induced creep is probably related to reorientation of protein components within the smooth muscle cell over the course of time brought about by phasic distention of the smooth muscle. Thus when high flow with associated decreased mean pressure occurs, the decreased smooth muscle tone brought about by the myogenic reflex permits increased distention of the artery wall with each pressure pulse. In addition, during high flow states, not only is the mean pressure decreased, but

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the entire pressure curve is changed, frequently with lowering particularly of the diastolic pressure and widening of the pulse pressure.[7] A wide pulse pressure produces maximal excursion of distention with each pressure cycle and thereby is particularly effective in evoking a creep phenomenon.

From the foregoing it is apparent that high flow dilatation, the precursor of hypertrophy, is brought about by the myogenic reflex followed by a creep phenomenon. It should be emphasized that both the myogenic reflex and creep are smooth muscle dependent. An increase of smooth muscle in the artery wall increases the response of these two mechanisms to the pressure changes associated with high flow. Collaterals, by their very nature, are in a constant high flow state. An increase in arterial smooth muscle throughout the body results in enhanced dilatation restricted to the arteries experiencing high flow. Therefore, only the collarteral arteries enlarge.

Danforth et al.[8] studied the aortic arch, descending aorta, cerebral, splenic, and femoral arteries of pregnant and Enovid-treated rabbits. "The significant increase in smooth muscle in the pregnant vessels was striking." The Enovid-treated rabbits had qualitatively similar changes to those found in pregnancy.

In 1967 we noted (unpublished) a marked increase in the size of collaterals to a ligated femoral artery in a pregnant dog—more than we had otherwise ever observed. Scheel et al.[9] recently reported "an amazingly high collateral circulation" in a pregnant dog on which an Ameroid constrictor had been placed around the left circumflex coronary artery two months earlier.

Until now mechanisms promoting artery enlargement have been considered. However, the stimulus for active growth of capillaries and arterioles, promoting their enlargement to small artery size, has been thought by Schaper et al.[10] to be chemical (hypoxia) and physical factors. Smooth muscle in vessels smaller than arteries presumably should be influenced by hormones in a manner similar to that for arterial smooth muscle.

It is attractive to hypothesize that increased arterial smooth muscle induced by ovarian hormones during the premenopausal years promotes enhanced collateralization in response to mechanisms described above. This might be the manner by which premenopausal women are protected from myocardial infarction and death.

Summary

A characteristic of collateral arteries is that they carry increased blood flow, and thereby experience high flow dilatation. The dilatation is accomplished by a myogenic reflex followed by a creep phenomenon. That is, increased flow of blood through a collateral artery results in decreased mean pressure which in turn induces a myogenic reflex in that artery's smooth muscle. The myogenic reflex reduces smooth muscle tone, thereby permitting increased artery distention by intraluminal pressure. Dilatation is then further enhanced by a creep phenomenon resulting from continuing phasic distention in the presence of decreased smooth muscle tone. Because both mechanisms of dilatation—the myogenic reflex and creep—are smooth muscle determined, an increased quantity of smooth muscle in the artery wall, induced by female hormones, results in increased vasodilatation during high flow. This mechanism explains enhanced collateralization by female hormones.

References

1. Jaffe, MD, Rowe PW: Mechanism of arterial dilatation following occlusion of femoral artery in dogs. *Am J Physiol* 218:1156-1160, 1970.
2. Bayliss WM: On the local reactions of the arterial wall to changes in internal pressure. *J Physiol* London 28: 220-231, 1902.
3. Silvertsson R: The hemodynamic importance of structural vascular changes in essential hypertension. *Acta Physiol Scand* Vol 79, Suppl 349: 5-56, 1970.
4. Rosenthal SL, Guyton AC: Hemodynamics of collateral vasodilatation following femoral artery occlusion in anesthetized dogs. *Circ Res* 23: 239-248, 1968.
5. Jaffe, MD, Rowe, PW: Persisting collateral artery dilatation in dogs. *Clin Res* 20: 379, 1972.
6. Alexander RS: Contribution of plastoelasticity to the tone of the cat portal vein. *Circ Res* 28: 461-469, 1971.
7. Gregg DE: Regulation of pressure and flow in the systemic and pulmonary circulation. In: The Physiological Basis of Medical Practice (8th ed.) edited by Best LH and Taylor NB, Baltimore: Williams and Wilkins, 1966, pp 772-773.
8. Danforth DM, Manalo-Estrella P, Buckingham JC: The effect of pregnancy and of Enovid on the rabbit vasculature. *Am J Obst et Gynecol* 88: 952-962, 1964.
9. Scheel KW, Banet M, Cobern O, et al: A quantitative approach to collateral and antegrade flows after coronary occlusion. *Am J Physiol* 222: 687-694, 1972.
10. Schaper W, DeBrabander M, Lewi P: DNA synthesis and mitoses in coronary collateral vessels of the dog. *Circ Res* 28: 671-679, 1971.

Review of perinatal mortality in a large metropolitan hospital—1970

By Lee B. Stevenson, MD
Detroit

Perinatal mortality rates are compared on the local and international level as an index of the quality of medical care. Interest in the study of perinatal mortality has been spurred by the Michigan Department of Public Health, which has cited hospitals of comparable obstetric populations and ranked the attendant perinatal mortality rates. These are disguised by lumping mortalities for a three-year period. The disadvantage is obvious—any hospital with one bad year will have three onerous rankings.

Every month at a Perinatal Mortality Conference each stillborn or neonatal death is discussed after reviewing the abstracted maternal and fetal records. Staff physicians and residents from the departments of obstetrics, pediatrics and pathology participate. Only deaths of 20 weeks gestation or greater and up to one month (28 days) after birth are included. Those deaths due to abortion are deleted at this time. The presence of preventible factors is considered and the loss is classified as non-preventible, possibly preventible, or preventible. Autopsy findings are reviewed. The most likely cause of death is assigned. The data discussed is for the calendar year 1970.

Table 1 lists, by month of death, the total mortality, the total births, the type of loss, the number of twins, and the number of premature infants delivered alive. The uncorrected perinatal mortality rate at the hospital for 1970 was 49 per 1,000 live births. There was one 14 weeks pregnancy with delivery of 300 grams infant, born alive in August, after premature rupture of the membranes following cerclage of the cervix done two months earlier at another hospital. Deleting this single neonatal death gives a perinatal mortality rate of 48 per 1,000 live births. If we delete seven more fetuses (including stillborns) with a birth weight below 500 grams we arrive at a corrected perinatal mortality rate of 43 per 1,000 live births.

By applying the same arithmetic "logic," eliminating 22 additional fetuses beneath 1000 grams reduces the perinatal rate to 27 per 1,000 live births. By further and irrationally proceeding to exclude all deaths below 1500 grams (11 more), we finally reach a perinatal rate of "respectability"—19 per 1,000 live births (**Table 2**).

What circumstances have produced these disturbing results? The patients' ages ranged from 14 to 44 with eight of the 65 mothers over 35 years of age placing them in a high risk group.

The parity range was 0 to 15 (**Table 3**). For the multiparous patients the record of frequency of gestation was not abstracted. Two of the para zero patients were over 35 and for one of them it was a second pregnancy loss. Sixteen of the patients had previous abortions.

Gestation age and low birth weight are old bedfellows. Forty-three of the 65 losses occurred in pregnancies of 32 weeks or less. Five of these were listed as 20 weeks gestation (**Table 4**).

Prenatal care is considered important in reducing perinatal mortality. Nineteen of our deaths occurred when NO prenatal care was given. When prenatal care was a matter of record, only 26 of the 65 mothers were seen before the 20th week of pregnancy (**Table 5**).

Race may have been a factor with 44 Negro, One oriental and 20 white mothers in the group. **Table 6** correlates this with fetal and neonatal deaths. The rate is three times as high for non-white fetal deaths, but a little less than twice as much for neonatal deaths. Are the non-white fetuses hardier?

There were 44 Protestant, 12 Catholic and nine other or unlisted religions. There were 48 married, 10 single, five separated and two divorced mothers in this group. Seventeen could be considered illegitimate pregnancies and illegitimacy is known to be associated with increased perinatal mortality. There were 34 male fetuses, 28 female fetuses, and three in whom sex was not identified in the record. This supports the belief that the female fetuses are hardier.

Maternal factors in perinatal deaths (**Table 7**) included 20 cases with premature rupture of membranes. Page,[2] in discussing pathogenesis and prophylaxis of low birth weights has cited premature rupture of membranes associated with 24 per cent of low birth weight babies in his study. Where viability is present, our management is aggressive

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Doctor Stevenson is director of medical education in obstetrics and gynecology and chief of the Ob-gyn Division at the Grace Hospital, Detroit. He is also vice chairman of the MSMS Committee on Maternal and Perinatal Health. His study was made at Henry Ford Hospital.

Table 1 Monthly Compilation of Perinatal Mortality Data

	Total Mortality	Total Births	NND*	SB#	Twins	Prematures
January	2	77	2	0	1	5
February	7	92	2	5	4	3
March	7	104	3	4	1	8
April	5	82	3	2	0	9
May	7	96	5	2	0	8
June	4	87	2	2	0	10
July	11	126	8	4	2	8
August	8	110	7	1	1	7
August	7	109	6	1	1	6
September	4	119	4	0	1	7
October	3	114	2	1	2	9
November	4	107	4	0	2	9
December	4	131	3	1	1	11
TOTALS	66	1345	44	22	15	94
Total c Aug. correction	65	1344	43	22	15	93

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*NND=Neonatal Death #SB=Stillborn

Table 2 Low Birth Weight Compilation of Perinatal Deaths

	NND	Stillborn	Total	Cumulative Total
<500 gms.	3	5	8	
500-999	14	8	22	30
1000-1499	9	3	12	42
1500-1999	9	1	10	52
2000-2500	5	1	6	58
TOTAL	40 (of 42)	18 (of 23)	58 (of 65)	

Table 3

PARITY: Range 0-15, Average 2, Mean 1

0—18
1—21
2—11
3—6
4—2
5—2
6—2
7—2
8—1
15—1

Table 4 Mortality Emphasis Prior to 33 Weeks

		Gestation	
< 20	1		
Unknown	1		
20	5	33	2
22	3	34	5
23	2	35	5
24	2	37	1
25	4	39	3
26	6	40	1
27	3	41	2
28	4	42	1
29	5	43	1
30	4		
31	3		
32	2		

Table 5 Number of Prenatal Visits and Weeks of Gestation of First Visit

PRENATAL CARE: Range 0—13, Average 3.5, Mean 3

0—19
1— 3
2— 4
3— 7
4— 5
5—5
6—4
7—4
8—3
10—3
12—1
13—1
Unknown—6

3 visits or less=33

TIME IN GESTATION OF FIRST PRENATAL VISIT

0 - 7 weeks—5
8 - 11 weeks—9
12 - 15 weeks—6
16 - 19 weeks—6
20 - 23 weeks—4
24 - 27 weeks—3
32 - 35 weeks—1
Unknown gestation—12
No prenatal care—19

with oxytocic stimulation and Cesarean section when this is ineffective. This may increase the number of lower birth weight babies, but infection is likely if these patients are not delivered quickly and occurs sometimes even when they are. There was one mother with gonorrhea at the time of hospital admission. There were 13 patients with hemorrhagic complications of pregnancy and five of these had elevation of blood pressure. There were nine with premature labor, cause unknown.

Fetal factors (**Table 8**) included breech presentation in nine. Whether the breech is a cause of prematurity or whether in prematures polarity is disproportionately breech is moot, but 14 per cent of these fetuses *were* in the breech presentation. Apgar scores below seven at one minute were present in 29 and below seven at five minutes in 23. A disturbing drop or fall in Apgar score was found in eight infants.

The autopsy has rarely been of value to us. Of the 65 deaths, 28 were followed by autopsy with a prevalent diagnosis of "prematurity."

Evaluation of the cases at the monthly Perinatal Mortality Conference led to the conclusion that there were no preventible factors in 21 pregnancies with deaths not preventible in the final analysis of the data available. Thirty-three deaths were listed as possibly preventible. In four deaths the information was inadequate to accurately assess preventibility. Seven of the deaths were thought to be preventible.

These seven cases deserve a closer scrutiny:

1. A 20-year-old single nulliparous Negro had no prenatal care. At 32 weeks she delivered a macerated stillborn infant weighing 900 grams. The mother had extensive old 3rd degree burn scars and a blood pressure of 190/120. She delivered at home, but was admitted with a retained

Table 6 Totals and Rates of Fetal Wastage

COMPARISON OF PERINATAL MORTALITY BY COLOR

Mortality	Total	Rate	White	Rate	Nonwhite	Rate
Perinatal	65	48	21	16	44	33
Fetal	22	16	5	4	17	13
Neonatal	43	32	16	12	27	20

placenta, which was easily delivered. Presumably she had had an abruptio placenta. Prenatal care should have disclosed the hypertension, which could have been treated. Preventibility: Patient.

2. A 21-year-old white married primigravida at 35 weeks gestation had a subdural hematoma as result of an automobile accident. She was transferred from another hospital because no neurosurgeon was available there. Burr holes were done to relieve the cerebral pressure and a "postmortem" Cesarean section produced a markedly depressed six pound female infant, who lived only minutes. Preventibility: (1) Auto accident and (2) moving the patient from the first hospital.

3. A 21-year-old single Negro during her third pregnancy was admitted with bleeding at 22 weeks gestation after receiving Ampicillin elsewhere. Membranes ruptured in the emergency room and she expelled a 470 grams stillborn female fetus with an estimated 40 per cent abruption of the placenta. Preventibility: Patient for multiple illegitimate pregnancies without adequate contraception and failing to find adequate care.

4. A 26-year-old divorced Negro, gravida 6, para 5, who had had no prenatal care and was seen with fever after premature rupture of membrances. Labor was stimulated with intravenous Pitocin and lasted 12½ hours. The 430 grams male infant lived about three hours. Preventibility: Patient—no prenatal care and failure to seek care before infection after premature rupture membranes. Generally, we classify cases with premature rupture of membranes as non-preventible, and if care had been sought earlier this case would probably have been classified as nonpreventible.

5. A 17-year-old single Negro gravida 2, para 0, had no prenatal care and at 25 weeks delivered a 690 grams unexplained stillborn male. She had been seen in the emergency room a month after her last period, after an automobile accident and had X-rays of skull, chest and abdomen, but was not seen again until the emergency room visit from which she was admitted. Preventibility: Patient—no prenatal care.

6. A 16-year-old single Negro gravida 2, para 1, with no prenatal care arrived at the emergency room and delivered an 800 gram female infant with an Apgar of 5 at 27 weeks gestation after a labor of less than three hours. Retained membranes were removed. The autopsy showed hyaline membrane disease. Preventibility: Medical—the baby survived a month and suddenly developed apnea.

Table 7 Some Maternal Factors in Perinatal Deaths

MATERNAL FACTORS

1—P.R.O.M.*	20
2—Abruptio Placenta	11
3—<35	8
4—High Blood Pressure	5
5—Placenta Previa	2
6—Premature Labor	9

*Premature rupture of membranes

Table 8 Some Fetal Factors Associated with Perinatal Mortality

FETAL FACTORS

1—Breech	9
2—Falling Apgar	8
3—Initial Apgar	<7=29
4—Five Min. Apgar	<7=23

Previous Abortions—16
Autopsy—28

Table 9 Causes of Death Assigned by Conference

LISTED CAUSES OF DEATH

1—Prematurity	29
2—Unknown	11
3—Hyaline Membrane (7) and Respiratory Distress (5)	12
4—Abruptio Placenta	7
5—Premature Labor	3
6—Infection	3
7—Placenta Previa	2
8—Fetal Cerebral Hemorrhage	2
9—Cardiac Arrest (during operation)	1
10—Pre-eclampsia	1
11—Anencephaly	1
12—Rubella	1
13—Consumption Coagulopathy	1
14—Fetoplacental Dysfunction	1
15—Maternal Hemorrhage	1

7. A 23-year-old married white gravida 2, para 1, whose prenatal care was given elsewhere, was admitted at 30 weeks gestation with fetal death three weeks earlier. She had had Rubella in the first trimester. Serial fibrinogen studies ranged from 175 to 120 to 110. The stillborn male weighed 480 grams and the autopsy diagnosis was "Rubella." Preventibility: Rubella immunization and/or the therapeutic abortion, one of which was never considered by the patient.

It is evident that the committee is hypercritical in its evaluation of the deaths. Three of the seven infants were under 500 grams with two of them

Table 10 Maternal and Fetal Complications Associated with Perinatal Mortality

MATERNAL MEDICAL COMPLICATIONS	
Hypofibrinogenemia	5
Incompetent Cervix	2
Ulcerative Colitis	2
Steroid Therapy	2
Rubella during Pregnancy	2
Sarcoidosis	1
Gonorrhea	1
Toxoplasmin +	1
Old 3rd Degree Burn Scars	1
Postmorten C.S.	1
Subacute Lupus Erythematosis	1
Severe Anemia (4 gm.)	1
Hypergammaglobulinemia	1
Abdominal Pregnancy	1
Rheumatic Heart Disease	7
Diabetic Glucose Tolerance Test	1
Uterine Rupture>Hysterectomy	1
FETAL COMPLICATIONS	
Twins	3
Anencephalic	1
"Postmaturity"	1
"Placentitis"	1
Decapitation during breech extraction thru 4 cm. Cx.	1
Cord around neck 3x	1
Pyloric stenosis—Preop. Exchange transfusion—Cardiac Arrest	1

stillborn. It should also be apparent that this report is hiding nothing.

The listed causes of death (**Table 9**) were multiple in some cases. Prematurity and hyaline membrane disease were leaders on the list. Eleven cases had an unknown reason for death.

Medical complications in the mothers and fetuses were listed in **Table 10.** These diagnoses add to the difficulty in management, particularly in a patient never seen at the hospital during her pregnancy, who comes to the emergency room for any medical care.

Discussion: Almost thirty percent (29.2%) of the patients who are a part of this perinatal mortality report are emergency room patients never seen at this hospital during their pregnancies. Fourteen had inadequate prenatal care with three or fewer visits during the pregnancy. Kohl[1] has also shown an increase in perinatal mortality in patients with no prenatal care and in those with fewer than three visits. Conversely, Kohl reported the lowest per cent of perinatal mortality in those with eight or more visits. Wallace[3] challenges us to explore the precise part of prenatal care which is involved in the difference.

By adding the inadequate and missing prenatal care cases, 33 of 65 patients—more than half—were deprived of good prenatal care, usually because they did not seek it, probably because of poor motivation.

The residential area around the hospital is primarily occupied by Negroes. One patient had prenatal care by a doctor who takes his patients to a hospital about three miles away. Her husband became confused when he was taking her to the hospital during labor and could not find the hospital. But he brought her to our emergency room.

Fifty-eight infants (89%) were below 2500 grams, 52 (80%) were below 2000 grams, 42 (65%) were below 1500 grams, 30 (46%) were below 1000 grams, and eight (12%) below 500 grams. (See **Table 2**)

Iatrogenic factors play a detrimental role in a training hospital more than in a hospital with a fixed medical staff. Although twenty-four hour coverage is an indisputable fact, the experience and competence of the individual on duty has a greater breadth and lesser depth than in a physician with many years of practice.

Even now, it is difficult to obtain 1970 Perinatal Mortality rates. The Michigan Department of Health has not released these figures, but Illinois' Department of Health has published a state perinatal mortality rate of 28.77 deaths per 1,000 live births with data reported from 219 hospitals in the state.

The July 12, 1971, issue of the *American Medical News* lead article cites neonatal mortality rates of 18.7 in 1960 and gives provisional figures of 15.4 for 1969 and 14.9 for 1970. By eliminating the 23 stillborn infants from our series we obtain a neonatal mortality rate of 31.25 per 1,000 live births for 1970.

What can be done to improve? This question is always asked, and there is no finite answer. The same problem handled by the same team—patient, obstetrician, pediatrician, anesthetist, and nurses—on successive days can have entirely different results. Finding the answer to WHY do membranes rupture prematurely may help prevent some of the premature infants, if it can be corrected. Motivating patients who have correctable problems to seek prenatal care may help save some more. Sterilizing patients with a malignant perinatal history may *not* be out of realm of reality today where the quality of the product of gestation so vital The same approach—sterilization—should be considered seriously by and for patients with significant serious medical problems.

References

1. Kohl, S. G., Community Obstetrical Study, *Progress Report,* December 1960, Brooklyn, New York.
2. Page, E. W., Pathogenesis and Prophylaxis of Low Birth Weights, *Clin. Obst. and Gynecology,* Vol. 13, No. 1, March 1970.
3. Wallace, H. M., Factors Associated with Perinatal Mortality and Morbidity, *Clin. Obst. and Gynecology,* Vol. 13, No. 1, March 1970.

Eczema Herpeticum

Presenting as hand, foot and mouth syndrome

By Ralph D. Cushing, MD
A. Martin Lerner, MD
Detroit

Abstract

A six-month-old boy with generalized eczema presented with vesicular lesions of the "hand, foot, and mouth syndrome." We expected to isolate coxsackievirus A-16 from the vesicles, but we found a type 1 HERPESVIRUS HOMINIS. We demonstrated a concurrent significant rise in passive hemagglutinating antibodies to type 1 HERPESVIRUS HOMINIS.

The occurrence of a vesicular eruption involving face, hands, and feet accompanied by an enanthem has been reported many times. Coxsackieviruses A-16 are generally incriminated, but occasionally coxsackieviruses A-5 or A-10 are involved.[1-3] Similarly, generalized eruptions caused by *Herpesvirus hominis* are well known, but vesicular lesions on the hands and fingers, to our knowledge, have not been described.[4-5]

Case Report

W. R. was a six-month-old black boy admitted to Detroit General Hospital on December 7, 1970 with fever and a rash which had persisted for two to three days. He had been a full-term delivery and was thriving until age two months when he developed atopic eczema. He received soybean milk and topical preparations for this condition. Thereafter, his dermatitis improved and worsened periodically. Family history was unremarkable.

At physical examination, the baby was well developed and nourished, and in no distress. He was conscious, alert, and active; his weight, length, and circumference of the head were normal. His rectal temperature was 102.4°F; pulse, 110 per minute. His skin was thickened, scaly and desquamating. Other areas were either crusted or oozing. His face was most heavily affected. The

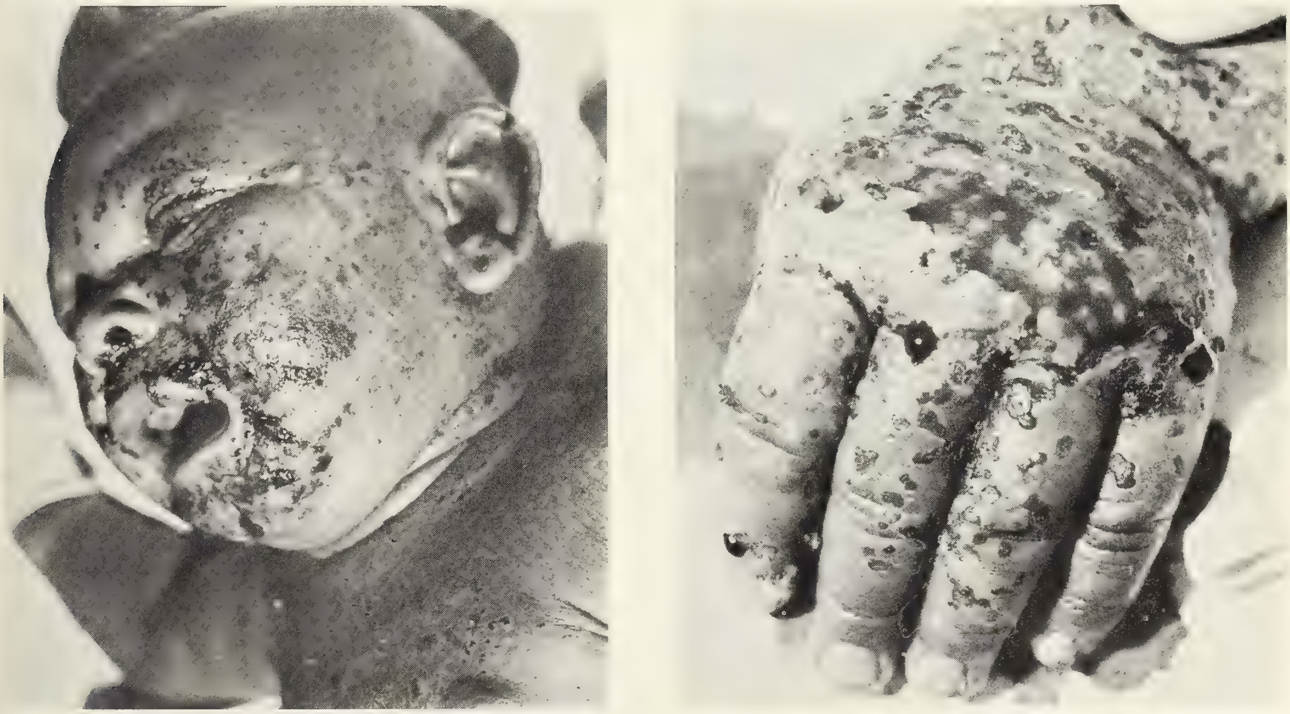

Figure 1 Vesicles on the lips about the mouth (A), and on the fingers (B) are shown in this six month old infant with eczema herpeticum.

At the time this paper was written, Doctor Cushing was a fellow in medicine; presently, he is an instructor in medicine and trainee in infectious diseases. Doctor Lerner is professor of medicine; chief, Hutzel Hospital Medical Unit, and chief, division of infectious diseases, Wayne State University School of Medicine.

rest of the physical examination was unremarkable.

Laboratory

Hemoglobin, 10.2 gm%; white blood cell count, 12,900, with 19% segmented neutrophiles, 43% bands, 28% lymphocytes, 5% monocytes and 5% eosinophiles. Platelets were 293,000 per mm.[3] A sickle cell preparation was negative; urinalysis within normal limits; and VDRL, non-reactive. The serum albumin was 2.97 gm% (normal, 2.7 to 5); globulins—α 1, 0.25 (normal, 0.34 to 0.4 gm/100 ml), α 2, 1.13 (normal, 0.56 to 0.7 gm/100ml), β, 0.68 (normal 0.69 to 0.9 gm/100 ml), γ, 0.48 (normal, 0.4 to 1.2 gm/100 ml). A serum immunoelectrophoresis showed: IgG, 260 mg% (normal, 427 ± 186); IgM, 75 mg% (normal, 43 ± 17); IgA, 50 mg% (normal, 28 ± 18). X-rays: At admission there was a left lower lobe infiltrate which cleared four days later. A bacterial culture from the rash on the face grew a penicillinase- and coagulase-positive, methicillin sensitive *Staphylococcus aureus.*

Course

At admission the child was given procaine penicillin 600,000 units intramuscularly every 12 hours. When the staphylococcus was recovered intravenous methicillin (250 mg, q.4 h) was added. After antibacterial sensitivities were known only methicillin was continued.

The infant improved, but on the fifth day in the hospital, his temperature rose to 105°F, and a vesicular eruption appeared on the scalp, face, trunk, arms, legs, hands, and fingers (**Fig. 1, A and B**). The soft palate and buccal mucosa were reddened. Using soothing, moist compresses (aluminum subacetate, 1.2 gm%) the vesicular eruption gradually subsided. He improved and was continued on intravenous methicillin for 15 days. The infant was discharged on December 23rd.

Virus Studies

A smear of material from the bases of one of the vesicles (Giemsa) showed intranuclear inclusions. Using standard methods, vesicular aspirate was inoculated into human diploid embryonic lung (WI-38) and a continuous line of rhesus kidney ($LLCMK_2$) cell cultures. After four days, the WI-38 cells showed 4+ cytopathic changes, while $LLCMK_2$ cultures remained negative over a 14 day period of observation.

A virus pool (Ric) was prepared in baby hamster kidney (BHK-21) cells. Ric virus titered $10^{4.5}$ TCD_{50}/ml. Infectivity was destroyed by pH 3 and ether.[6] The virus produced microplaques in BHK-21 cells. The minimal inhibitory concentration of idoxuridine was 10 μgm/0.4 ml.[7] The virus was identified as *Herpesvirus hominis,* type 1 by neutralization tests in BHK-21 cells using hyperimmune unitypic rabbit serum.[8] Type specific passive hemagglutinating antibodies to *H. hominis* were assayed in serum obtained during this illness and six months later. Respective titers were <1:5 and 1:320.[9,10]

It is likely that the unusual distribution of vesicles on the hands and fingers of this infant with eczema herpeticum resembling hand, foot, and mouth syndrome resulted from the baby's sucking of his fingers and led to contiguous spread from the oral enanthem.

References

1. Robinson, C.R., Doane, F.W. and Rhodes, A.J.: Report of an outbreak of febrile illness with pharyngeal lesions and exanthem: Toronto, summer 1957 - isolation of group A coxsackievirus. *Canad. Med. Assn. J.* 79:615-621, 1958.
2. Cherry, J.D. and Jahn, C.L.: Hand, foot, and mouth syndrome. Report of six cases due to coxsackievirus group A, type 16. *Pediat.* 37:637-648, 1966.
3. Cherry, J.D.: Newer viral exanthems. *Adv. Pediat.* 16:233-286, 1969.
4. Brain, R.T.: The clinical vagaries of the herpes virus. *Brit. Med. J.* 1:1061-1068, 1956.
5. Scott, T.F. McN. and Tokumaru, T.: "The Herpesvirus Group" in *Viral and Rickettsial Infections of Man.* Edited by F.L. Horsfall, Jr. and I. Tamm, fourth edition. Phila. and Montreal, J.B. Lippincott Co., p. 899.
6. Jackson, G.G. and Muldoon, R.L.: A Manual of Newer Viruses and Non-bacterial Agents Causing Respiratory Illness in Man. Second edition, 1969; prepared under the sponsorship of the Commission on Acute Respiratory Diseases of the Armed Forces Epidemiological Board. pp. 1 and 12 of Part III, Laboratory Procedures.
7. Lerner, A.M. and Bailey, E.J.: Concentrations of idoxuridine in serum, urine, and cerebrospinal fluid of patients with suspected diagnoses of *Herpesvirus hominis* encephalitis *J. Clin. Invest.* 51: 45-49, 1972.
8. Lerner, A.M., E.J. Bailey, and D.C. Nolan: Complement-requiring neutralizing antibodies in *Herpesvirus hominis* encephalitis. *J. Immunol.* 104 607-615, 1970.
9. Fuccillo, D.A., Moder, F.L., Catalino, L.W., Jr. et al.: *Herpesvirus hominis,* types 1 and 2: a specific micro indirect hemagglutination test. *Proc. Soc. Exp. Biol. Med.* 133:735-739, 1970.
10. Lerner, A.M., Lauter, C.B., Nolan, D.C., and Shippey, M.J.: Passive hemagglutinating antibodies in cerebrospinal fluids in *Herpesvirus hominis* encephalitis. *Proc. Soc. Exp. Biol. O Med.* (in press).

The authors were aided in this study by PHS Training (AI 00261-08) and PHS Research (AI 09336-02) Grants from the National Institute of Allergy and Infectious Diseases.

Peptic ulcer surgery in the elderly in a community hospital

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Often we tend to operate on the elderly patient only as a last resort. Thus, we decided to study the surgical treatment of the peptic ulcer in the elderly. First, we wanted to find out just how great the differences are in the surgical treatment of peptic ulcer in the elderly as compared to younger persons and secondly, we felt that a study of the various procedures used in the treatment of the peptic ulcer in the elderly would give a good indication of just how good that particular procedure would be in any age group, since its use in the elderly would test that procedure to the ultimate limits of its effectiveness.

Clinical Material

AGE—We reviewed all of our cases of surgical treatment of peptic ulcer over the past 10 years (1961-1970) and found a total of 1,319 cases. One hundred and thirty-two patients met our criteria of a minimum of 70 years of age. One hundred and eight patients were between 70 and 80 years old (82%), twenty-three patients were between 80 and 90 years old (17%), and one was 94 years old (1%).

SEX—Sixty-one percent were males, thirty-nine percent were females.

LOCATION—Seventy-three (56%) of these patients had a duodenal ulcer and 59 (44%) had a gastric ulcer or both gastric and duodenal ulcers.

Surgical Procedures

Four procedures were studied in this review. Gastrectomy with or without vagotomy (94 cases), pyloroplasty alone (11 cases), pyloroplasty with vagotomy (10 cases), and other drainage procedure without gastrectomy, usually gastrojejunostomy (17 cases). Sixty-three percent of the cases were done by 10 different surgeons doing at least five cases, but no one surgeon did more than 20 cases.

Hospital Stay

The patients undergoing gastrectomy averaged 19.7 days of hospitalization (less than 70 years old averaged 14.5 days). Those who had pyloroplasty alone averaged 20.6 days (less than 70 years old averaged 12.3 days), plyoroplasty and vagotomy averaged 19.0 days (less than 70 years old averaged 12.2 days) and drainage procedure averaged 24.0 days (less than 70 years old averaged 21.0 days).

Blood Loss

Of all patients with gastrectomy an average of 3.3 units of blood was given (less than 70 years old averaged 1.5 units).

Pyloroplasty patients averaged 5.9 units of blood (less than 70 years averaged 0.9 units), pyloroplasty with vagotomy averaged 3.1 units of blood (less than 70 years old averaged 1.0 units) and drainage procedure averaged 3.5 units of blood (less than 70 years old averaged 1.5 units).

Massive Bleed

A massive bleed was arbitrarily defined as nine units or more of blood transfused. For those patients undergoing gastrectomy, 16 had massive bleeding (17%) with six deaths due to bleeding (37% mortality); of the pyloroplasty patients, six had massive bleeding (55%) with three deaths due to bleeding (50% mortality). There were two cases of massive bleeding (20%) among the pyloroplasty with vagotomy patients with no deaths and two cases (12%) among the patients with a drainage procedure with one death (50% mortality). Massive bleeding in the below 70 year old age group averaged 6%, 4%, 5% and 6% of the total patients respectively.

Mortality

Forty-four patients with a gastric ulcer or duodenal plus gastric ulcer underwent gastric resection with six deaths or 13.6% mortality. Three of the deaths were due to massive bleeding, two were due to pulmonary embolus post-operatively, and one due to hemorrhagic necrosis of the colon. Fifty patients with a duodenal ulcer had a gastric resection with six deaths or 12.0% mortality. Three of the deaths were due to massive bleeding, one due to blown duodenal stump, one due to pneumonia and one due to cardiac arrest post-operatively. (Gastrectomy was done in 750 patients in control - 2.5% mortality).

Six patients with gastric ulcer or gastric plus duodenal ulcers had pyloroplasty alone with one

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death or 16.0% mortality. This death was due to massive hemorrhage. Five patients with duodenal ulcer had pyloroplasty alone with two deaths or 40% mortality. Both of these deaths were due to massive bleeding. (140 patients in control with pyloroplasty - 2.8% mortality).

Three patients with gastric ulcer had pyloroplasty with vagotomy with no deaths. Seven patients with duodenal ulcer had pyloroplasty with vagotomy with one death or 14.3% mortality. This patient died shortly post-operatively with shock which began during surgery (not due to bleeding). (250 patients in control with V&P - 0.4% mortality).

Six patients with gastric ulcer had a drainage procedure alone with one death or 16.6% mortality. This death was due to pneumonia post-operatively. Eleven patients with duodenal ulcer had a drainage procedure alone with three deaths or a 27% mortality. Two of these deaths were due to massive bleeding and one due to pneumonia post-operatively. (80 patients in control with drainage procedure - 7.5% mortality).

Complications

All deaths were considered a complication of the surgical procedure. There were 21 complications (12 of these deaths) in the gastrectomy group for a 22% rate. Five of these were blown duodenal stump, three cases were due to infection and there was one evisceration. There were three complications (all deaths) in the pyloroplasty group for a 27% rate. There were two complications (one death) in the pyloroplasty with vagotomy group for a 20% rate. This was a urinary infection post-operatively. There were seven complications (four deaths) in the drainage procedure group for a rate of 41%. There was one each of evisceration, femoral embolus, and wound infection. The complication rate in the below 70 year old age group was 12%, 10%, 5%, and 26% respectively.

Discussion

First, let us compare the elderly with the below-70-year-old age group. We notice that the hospital average stay is between 3.0 and 8.3 days longer for the elderly and we would expect that most of this time is due to delayed surgical intervention in the course of the patient's disease. This is also pointed out when we examine the statistics concerning blood loss. The elderly age group in every instance had at least twice as much blood loss as compared to the younger group. The percentage of the elderly patients with massive bleeding in every category was at least twice that of the younger age group. Massive bleeding accounted for one-third of the deaths following gastrectomy, one-half of the deaths following pyloroplasty or the drainage procedure. Jegathesan and Whitehill[1] report on 28.5% mortality for emergency gastric surgery in patients over 60 years old, but only a slight increase over the general population for elective surgery.

All this points to the fact that we are delaying our surgery in the elderly patient nearly to the point of being forced to operate with the ensuing risk of greater mortality. Therefore, we must endeavor to bring these patients to surgery as soon as we can see it is indicated.

Concerning the choice of surgical procedure for peptic ulcer, the drainage procedure would seem to be the least desirable, since it fails in every aspect of this study: longest hospital stay, greatest number of complications, highest mortality and least effective in the face of massive bleeding. This is readily seen even with only the 17 cases we have presented here. Because our series involves only 11 cases of pyloroplasty alone and 10 cases of pyloroplasty with vagotomy, we feel that we cannot draw any definite conclusions concerning these procedures. However, it would appear that the pattern being formed would indicate that these procedures may not be the best to use in the elderly age group.

As was pointed out earlier, 44% of these elderly patients had gastric ulcers and it is our opinion that generally speaking, a gastric resection would be indicated. Also, many of these patients have had significant duodenal scarring secondary to the chronic duodenal ulcer which would make a pyloroplasty very difficult to perform safely.

Gastrectomy in our hospital with 13.6% mortality for gastric ulcer and 12.0% mortality for duodenal ulcer compares very favorably with other surgical procedures in the elderly. Steiger[2] reports an 8% mortality for cholecystectomy and Block[3] reports a 17.1% mortality for colon resection.

Again, let us emphasize the need for earlier corrective surgery for peptic ulcer disease in the elderly to prevent the increased morbidity and mortality that can only result from indecisive action on the part of his physicians.

References

1. Jegathesan, S., and Whitehill, J.: Surgery in the elderly. *Postgraduate Medicine,* April 1971, pp 211-215.
2. Steiger, E.; Seltzer, M.H., and Rasato, F.E.: Cholecystectomy in the aged. *Annals of Surgery,* 174:142-144, July 1971.
3. Block, G.E., and Enker, W.E.: Survival after operations for rectal carcinoma in patients over 70 years of age. *Annals of Surgery,* 174:521-529, September 1971.

Villous Adenoma - a review

By H. Jay Zeskind, MD
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The following review of the literature pertaining to villous adenoma is an attempt to clarify the clinical picture and establish guidelines for the handling of this disease entity.

Villous adenomas (villous tumor, villous papilloma, papillary adenoma, glandular papilloma, papilloma, true papilloma, villoma, adenoma destruans) are broadly based sessile lesions which are difficult to distinguish on palpation because of the fact that they are extremely soft and velvety to the touch. In coloration they are usually recognized by a whitish appearance, however they may be reddish-gray or tan. The adenoma is made up of a large number of friable villi or finger-like projections joined at their bases in a pattern which is frequently lobulated. The entire lesion is usually covered by a thick viscid mucous. Severe fluid and electrolyte depletion may result from loss of mucous or watery secretions over the great surface area of a large tumor.[1-3,21,23,28,32,33]

In 1948, Sunderland and Binkley[4] distinguished villous adenomas from adenomatous polyps. They felt that villous adenoma could be considered a growth variant of the common mucosal adenoma. As such, they are characterized by a disproportionate increase in growth of the surface epithelium in comparison to the growth of the epithelium of the glands, a marked tendency to recur after local removal, and lateral spread by replacement of the covering epithelium of the surrounding mucosa.

Nicoloff[5] reviewed 1,297 cases of polyps and carcinomas of the colon and rectum and compiled the presenting complaints for the 55 cases with villous adenoma. **Table 1** notes his results, which were consistent with the findings of others.[27-30]

Villous adenomas represent 2-5% of colorectal polyps.[4-7] The average age at presentation was between 63 and 65 years, with a range noted from 49 years to 85 years.[4-7] The majority of patients are over 60 years of age.[4-7] In comparison, the average age at presentation of benign adenomas and rectosigmoid cancer is 54.5 years and 55.1 years respectively.[6] There is no apparent familial or sexual tendencies noted for villous adenoma.[4,5,7]

Villous adenoma has been found to occur throughout the colon, with 80% in the rectum, 8% in the rectosigmoid, 1.8% in the midsigmoid, 3.6% in the transverse colon, 1.8% in the ascending colon, and 3.6% in the cecum.[5,8] An infrequent villous adenoma has been noted in the small bowel.[37] Approximately 90% of the villous adenomas were discovered on proctoscopic examination, while the remainder were found by barium enema examination; 70% are within the reach of the examining finger.[5] The lesions ranged in size from 0.5 cm to more than 11 cm, with the majority between three to six cm.[5]

Table 1: Presenting Complaints[5]

	%
Rectal Bleeding	56.3
Diarrhea	23.6
Constipation	21.8
Mucous in stools	12.7
Protrusion of mass	5.4
Inguinal Hernia	7.2
Routine work-up	12.7
No symptoms	21.8

Table 2: Malignancy Associated with Villous Adenoma

Investigator	Year	No. Patients	% Malignant
Sunderland[4]	1948	48	68
Fisher[36]	1953	4	100
Bacon[11]	1954	28	36
Freund[21]	1955	20	30
Swinton[12]	1955	35	31
Hines [22]	1955	37	30
Lee[23]	1956	6	100
Ackerman[7]	1958	50	76
Smith[43]	1960	25	20
Enterline[9]	1962	81	55*
Dreese[39]	1962	41	30
Liechty[8,26]	1963	112	22
Derjonecz[44]	1964	76	48
Schapiro[24]	1965	165	42
Nicoloff[5]	1968	55	36
Boling[15]	1969	40	90
Olson[29]	1969	97	35
Hanley[35,40,41]	1971	217	19**

*14 of the 18 villous adenomas larger than 6 cm in size were malignant.

**only 45% could be classified benign.

Malignant Potential

Size of the villous adenoma appears to be associated with malignancy. There is an increasing rate of malignancy in lesions larger than six cm.[9] All lesions larger than eight cm were malignant.[5] There was little correlation between size and malignancy in lesions less than six cm in size, with the smallest malignant villous adenoma noted being 1.5 cm.[5]

Table 2 presents the incidence of malignant villous adenoma reported by various investigators. Sunderland and Binkley[4] noted that 68.7% of their cases showed areas of cytological carcinoma

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in the original tumor or in a recurrence at the site of removal, and that 39.5% developed invasive carcinoma. Other figures reported varied from 22% frank malignancy,[8] to 100% "eventually malignant,"[10]* with gradations between these two extremes depending, in part, on the degree of atypicality/carcinoma necessary before a tumor was labeled malignant by the particular investigator.[1,7,9,11,12,15]

Evaluation and Treatment

Turell and Haller[20] assert that there is little to substantiate the theory of transformation of villous adenoma to carcinoma, but they do not deny that there is some coincidence between the presence of villous adenoma and carcinoma. Morson and Bussey[13] feel that presently available evidence suggests that intestinal cancers have a preceding benign or precancerous phase which presents morphologically as villous adenomas and which can be large or small. Wheat and Ackerman[7] suggest that where no invasive carcinoma was demonstrable, cure could be affected in most instances by adequate local excision. Since there is a high recurrency rate,[1,25] others take a more vigorous approach. They feel that the potential for malignancy is also so great that cancer surgery is dictated.[1,2,5,13,14,29,38] However, Boling[15] favors radical surgery only if there is fixation, induration, or ulceration present. Of note here is Spratt and Ackerman's statement that "the chance of a tumor, 1.2 cm in diameter or greater, being a cancer is more significant than the mortality rate attending its removal."[38]

Since the villous adenoma is broad based, small biopsies are inconclusive.[8] If the tumor is small, complete excision and thorough histologic examination should be sufficient.[2,5,7] If malignancy is found on detailed sectioning, appropriate cancer surgery is done.[2,5] If the tumor is larger than six cm, and more than seven cm above the pectinate line, then a cancer type anterior resection with primary anastomosis and node dissection is done. This is done even if invasive cancer is not demonstrable histologically because of the propensity for recurrence after local excision and the significant malignant potential of this size villous adenoma.[1,2,5,9] When the lesion is in the rectum and is larger than six cm in size, an abdominoperineal resection is done. Lesions elsewhere in the colon and larger than six cm in size warrant a segmental resection with removal of mesentary and the lymph nodes draining that area.[1,2,5,8,11,14,16,34]

Survival

"Benign villous adenomas" are associated with an 85% five year survival rate, not too different from the 82% five year survival associated with early polypoid carcinomas.[17,42] "Malignant villous adenomas" had a five year survival of only 20-30%.[5,18]

Associated Pathology

Nicoloff[5] noted that 57.5% of his patients had associated benign adenomatous polyps and 7.2% had associated separate malignancies of the bowel. Wheat and Ackerman[7] reported that 32% of their series of cases were associated with another separate malignant or benign neoplasm, Bacon[11] reported a 17.8% association, and Welch[28] noted a 26.8% association. Gruber's[19] suggestion of extended colonic resection may be of prophylactic advantage in dealing with villous adenomas, in view of the associations noted above. Porter and Liechty[26] noted that 15.7% of their patients had other primary malignant neoplasms involving the skin, bronchi, prostate, gallbladder, and uterus, as well as the gastrointestinal tract. Of further interest is Boling's[15] contention that there is a carcinogenic factor present, and any patient with a villous adenoma has an added risk of having multiple carcinomas occur in his lifetime, especially involving the pancreas, bladder, and lungs.

Conclusion

This review of the literature on villous adenoma suggests the following guidelines in the clinical management of this entity:

1. Routine proctosigmoidoscopic examination is the most practical means of determining the presence of villous adenomas at the present time.
2. Villous adenoma has a high degree of association with malignancy.
3. This association is significant enough to warrant surgical intervention.
4. Lesions larger than 6 cm require extensive cancer surgery.
5. Lesions smaller than 6 cm require complete excision and thorough histological examination.
6. Frequent re-examination is required to exclude local recurrences, metachronous lesions, or metastases.
7. The patient must be frequently examined for other separate benign and malignant neoplasms.

References

1. Nardi, G.L., and Zuidema, G.D., *Surgery*, second edition, Boston, Little, Brown and Company, 1965, pp. 484-485.
2. Storer, E.H., and Lockwood, R.A., *Colon, Rectum, and Anus, Principles of Surgery*, Edited by S.I. Schwartz, New York, McGraw-Hill Book Company, 1969, pp. 974-975.

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*Author did not give criteria for "eventually malignant."

3. *Stedman's Medical Dictionary,* Baltimore, The Williams and Wilkins Company, 1966, pp. 27-28, 1169-1170.
4. Sunderland, D.A., and Binkley, G.E., Papillary adenomas of the large intestine: A Clinical and Morphological Study of 48 Cases, *Cancer,* 1:184-205, 1948.
5. Nicoloff, D.M., Ellis, C.M., Humphrey, E.W., Management of villous adenomas of the colon and rectum, *Arch. Surg.,* 97:254-260, Aug., 1968.
6. Rhoads, J.E., Allen, J.G., Harkins, H.N., and Moyer, C.A., *Surgery,* Philadelphia, J.B. Lippincott Company, 1970, pp. 1150-1152.
7. Wheat, M.W., and Ackerman, L.V., Villous adenomas of the large intestine, *Ann Surg.,* 147:476-487, 1958.
8. Liechty, R.D., and Soper, R.T., *Synopsis of Surgery,* St. Louis, C.V. Mosby, 1968.
9. Enterline, H.T., et al., Malignant potential of adenomas of the colon and rectum, *JAMA,* 179:No. 5, 322-330, 1962.
10. Dockerty, M.B., Pathologic aspects in the control of spread of colonic carcinoma, Proc. Staff Meet. Mayo Clin., 33:157-163, 1958.
11. Bacon, H.E., Lowell, E.J., Trimpi, H.D., Villous papillomas of the colon and rectum, *Surgery,* 35:77-87, 1954.
12. Swinton, N.W., Meissner, W.A., Soland, W.A. Jr., Papillary adenomas of the colon and rectum, *Arch. Int. Med.,* 96:544-551, 1955.
13. Morson, B.C., Bussey, H.J.R., Predisposing causes of intestinal cancer, *Curr. Prob. Surg.,* Feb., 1970.
14. DeDombal, F.T., Carcinoma of the rectum and colon, a continuing challenge, *Practitioner,* 203: 626-633, Nov., 1969.
15. Boling, E., Management of villous tumors of the rectum and colon, *Southern Med. J.,* 62:639-641, June, 1969.
16. Editorial: Colorectal polyps, *N.Y.J. Med.,* 69:533-534, Feb. 15, 1969.
17. Scudamore, H.H., Cancer of the colon and rectum, *Dis. Colon Rectum,* 12:105-114, Mar.-Apr., 1969.
18. Baker, R.R., Adenocarcinoma of the colon and rectum, *Johns Hopkins Med. J.,* 125:225-232, Oct., 1969.
19. Gruber, R., The second colorectal carcinoma—a retrospective analysis of the value of extended colonic resection, *Am. J. Surg.,* 119:652-654, June, 1970.
20. Turell, R., and Haller, J.D., Collective review—A re-evaluation of the malignant potential of colorectal adenomas, *Surg., Gyn. Ob.,* 119:867-883, 1964.
21. Freund, N.L., Villous tumors of the rectum, *Amer. J. Surg.,* 90:873-876, Nov., 1955.
22. Hines, M.O., Hanley, P.N., and Robert, S., Villous tumors of the colon and rectum, Clinical experience with 37 cases, *Southern Med. J.,* 48:891-897, Sept., 1955.
23. Lee, H.C., and Kay, S, Papillary tumors of the rectum, *Ann. Surg.,* 143:780-790, June, 1956.
24. Schapiro, A., Villous papilloma of the rectum and colon, *Arch. Surg.,* 91:362-370, Aug., 1965.
25. Grinnell, R.S., and Lane, N., Benign and malignant adenomatous polyps and papillary adenomas of the colon and rectum, *Int. Abstr. Surg.,* 106:519-538, June, 1958.
26. Porter, S.D., and Liechty, R.D., Villous adenomas in 108 patients, *Amer. J. Surg.,* 116:13-16, July, 1968.
27. Harp, R.A., Waugh, J.M., Dockerty, M.B., Noninfiltrating villous colonic tumors, *Dis. Colon Rectum,* 5:121-133, March-April, 1962.
28. Welch, J.S., Dockerty, M.B., Villous carcinoma of the colon, *Dis. Colon Rectum,* 1:251-261, July-Aug., 1958.
29. Olson, R.O. Jr., and Daves, W.C., Villous adenomas of the colon, benign or malignant? *Arch. Surg.* (Chic.), 98:487-492, April, 1969.
30. Henshall, G.K. Jr., Villous tumors of the large bowel and presentation of an unusual case, *Amer. J. Roentgen.,* 84:1105-1113, Dec., 1960.
31. Kurtzman, R.S., Villous adenoma of the rectum, *Mich. Med.,* 69:770, Sept., 1970.
32. Wolf, B.S., Roentgen diagnosis of villous tumors of the colon, *Amer. J. Roentgen.,* 84:1093-1104, Dec., 1960.
33. Marshak, R.H., and Lindner, A.E., Villous tumors of the large bowel, *Am. J. Gastroenterol.,* 54:509-511, Nov., 1970.
34. Jackson, B.R., Adenomas of the colon - the rationale for resection as the treatment of choice, *Dis. Colon, Rectum,* 13:47-58, Jan.-Feb., 1970.
35. Hanley, P.H., et al., Villous tumors: experience with 163 patients, *Southern Med. J.,* 55:233-238, March, 1962.
36. Fisher, E.R., and Castro, A.F., Diffuse papillomatous polyps (villous tumors) of the colon and rectum, *Amer. J. Surg.,* 85:146-151, Feb., 1953.
37. Keeley, A.F., Villous adenoma of the small bowel: an unusual lesion. *Gastroenterology,* 57:185-190, Aug., 1969.
38. Spratt, J.S. Jr., and Ackerman, L.V., Pathologic significance of polyps of the rectum and colon, *Dis. Colon Rectum,* 3:330-335, 1960.
39. Dreese, W.C., et al., Villous tumors of the rectum and sigmoid, *Surg. Gyn. Obstet.,* 115-182-186, Aug., 1962.
40. Hanley, P.H., Hines, M.O., and Ray, J.E., Villous tumors, experience with 217 patients. *American Surgeon,* 37:190-197, April, 1971.
41. Hines, M.O., Hanley, P.H., Schramel, R., Villous tumors of the colon and rectum: clinical experience with 37 cases, *Southern Med. J.,* 48:891-897, Sept., 1955.
42. Thomas, W.H., Analysis of 830 patients with rectal adenocarcinoma, *Surg. Gyn. Obstet.,* 129:10-14, July, 1969.
43. Smith, W.T., Villous papillomas of the rectum: a review of 25 cases, *Minn. Med.,* 43:106-108, Feb., 1960.
44. Derjonecz, J.J., and Clark, C.W., Papillary adenomas of the colon and rectum: clinical and pathologic behavior, *Canad. J. Surg.,* 7:389-396, Oct., 1964.

Perinatal Tips

By Paul M. Zavell, MD
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The following case from the files of the Wayne County Medical Society Perinatal Mortality Committee is presented as an aid in continuing education.

Maternal

Little is known of this 20-year-old, gravida 1, Black mother. She had no prenatal care and presented herself at 32 weeks of gestation in labor in the emergency room of a large hospital. Apparently her membranes had been ruptured for three days before she started into labor. She denied any illness, bleeding, or other complications during her pregnancy.

Fetal

After six hours of good labor a three-pound, 15 ounce Black male was delivered spontaneously. The apgar score was six at one minute and eight at five minutes. Once placed in an isolette in the premature nursery the infant did very well without any problem. By the 12th day of life his weight had reached four pounds, five ounces.

On the 13th day the baby had a bloody stool and some petechiae were noted on the lower abdomen and the right forearm. Temperature had previously been 37° to 38° C. On examination two days previously there was a questionable enlargement of the liver. Blood culture was negative and Fibrinogen levels were unmeasurably low.

The infant went into shock three hours after the initial signs of bleeding when a blood transfusion of 40 cc. of fresh whole blood was started via bone marrow of left tibia. His condition improved and the vital signs and the hemoglobin (11.9 gm%) remained stable overnight, although the blood still oozed from the heel puncture. Antibiotics, including Penicillin and Kanamycin in proper doses were started along with the blood transfusion, as well as Solu-Cortef through bone marrow.

On the following day, CBC revealed a hemoglobin of 10.0 gm. %; WBC was 24,000 with marked left shift; platelets 15,500. Coagulation studies showed no end point of both prothrombin time and partial thromboplastin time. Bilirubin was 10.5 mgs.% total and 6.3 mgs % direct. Heparinization of the blood was accomplished by giving heparin, 100 units q.6.h. through bone marrow, and another 25 cc. of fresh whole blood with one unit of concentrated platelets was also given.

The progress coagulation studies revealed the prothrombin time was 5.5 minutes with a control of 12 seconds. Partial thromboplastin time was 405 seconds with a control of 64 seconds. Platelets went up to 70,000 to 80,000. At this time the patient was found to have a severely distended abdomen and a continuous Grade III/IV murmur was heard best under the left clavicle (the first heart sound was normal and the second heart sound was normally split). Chest X-ray showed the heart size was not significantly increased and the abdominal X-ray showed generalized ileus.

On the third day of this bleeding disorder, the patient started having foamy bloody material draining from the mouth. Fresh and old blood were obtained from gastric aspiration. Electrolytes showed Na 134 mEq/1, Cl 118 mEq/1, K 9.8 mEq/1. CO_2 combining power 12 mEq/1. pH was 7.12. The patient suddenly stopped breathing before further treatment could be given.

An autopsy was done revealing scattered Herpes Simple abscesses throughout the body.

Perinatal Committee Comments

1. Any infant who does well for 7 to 8 days of life and then goes downhill quickly with signs of infection not responding well to antibiotics should be suspect of a possible viral disease. The most common types are Herpes Simplex, Adenovirus, Coxachie and Cytomegalic Inclusion Viruses.
2. Only one out of every three such infants ever has a vesicle or similar lesion noted externally before death.
3. It is felt that any doctors, nurses and fathers who have a Herpes Simplex infection should be kept out of the delivery room (despite lack of absolute proof of a one to one relationship here to infection later in the infant).
4. Although there was some difference of opinion the committee felt that in an instance where a similar viral infection is strongly suspected gamma globulin might be considered for the infant.
5. Severe infections with I.T.P. ("Idiopathic Thrombocytopenia Purpura") are usually autoimmune but rarely occur before 10 weeks of age.

Doctor Zavell is chairman, Neo-Natal and Hospital Care Committee, Michigan Chapter, AAP; and chairman, Perinatal Mortality Study Committee, Wayne County Medical Society.

Low-cost European travel offered to MSMS members

A low-cost plan for travel to Europe has been investigated for MSMS members and recommended in a letter from Alexander Blain III, MD, Detroit, chairman of MSMS Group Travel Arrangements.

"MSMS is endeavouring to make available a well-rounded travel program offering various plans to suit your individual desires and requirements," explains Doctor Blain in his letter. "We feel the United European American Club will be welcomed by our younger members and the students in your family."

The UEAC offers a comprehensive schedule of flights to Europe at genuine bargain fares which do not include unwanted tours or hotel and meal plans. The traveler is not required to travel with a group and has the flexibility of planning when and where he wants to go while abroad and how long he wishes to stay in each place. He chooses the hotels he wants and books them through any travel agency.

The UEAC is one of the oldest (11 years) and largest (100,000 members) clubs of its kind and enjoys an excellent reputation. The club maintains fully staffed offices throughout the US and Europe.

Further information may be obtained from MSMS headquarters.

Michigan authors

S. F. Markel, MD, Ann Arbor, "Plasma Cell Granuloma or Myeloma," a letter, *Journal of the American Medical Association,* April 10, 1972.

Donald J. Birmingham, MD, Detroit, contributor to "Symposium on Dermatology," *Modern Medicine,* April 17, 1972.

Melvyn Rubenfire, MD, and Saul Rosenzweig, MD, Detroit, "Artifacts Simulating Atrial Flutter," page 1130, *Journal of the American Medical Association,* May 22, 1972.

Terry S. Vincent, MD, Grosse Pointe Woods, "You haven't dickered 'til you've bought a Model T," page 169, *Medical Economics,* April 24, 1972.

John G. Batsakis, MD, Ann Arbor, "Reference Method for Measuring Cholesterol," page 124, *Pathologist,* May, 1972.

Joseph N. Aquilina, MD, Saginaw, "Traumatic Luxation of the Testis; Case Report," page 449, *Minnesota Medicine,* May, 1972.

J. J. Bookstein, MD, Ann Arbor, et al, "Radiologic Aspects of Renovascular Hypertension," page 1218, and "Urography in Unilateral Renovascular Disease," page 1225, *Journal of the American Medical Association,* May 29, 1972.

Michigan mediscene

JULY 15-16—"Summer of 72" seminar weekend for State of Michigan Medical Assistants, Schuss Mountain. Mancelona, contact: Mrs. Audrie Chute, chairman, 3600 W. 13 Mile Road, Royal Oak, 48072

JULY 15-19—26th Annual Postgraduate Scientific Assembly of Michigan Academy of Family Physicians, Boyne Highlands, Harbor Springs, contact: George Hoekstra, MD, chairman, 100 Maple St., Parchment, 49004

JULY 27-28—Coller-Penberthy-Thirlby Conference, Park Place Motor Inn, Traverse City, contact: L. P. Skendzel, MD, Traverse City, chairman

AUG. 4-5—Annual Midsummer meeting, MSMS Council, Boyne Highlands, contact: Warren F. Tryloff, MSMS director

AUG. 11-13—"Psychiatry and the Family," sponsored by Michigan Psychiatric Society and Michigan District Branch, American Psychiatric Association, Grand Hotel, Mackinac Island, contact: Emanuel Tanay, MD, chairman, 852 Fisher Building, Detroit, 48202

AUG. 25-26—Physician-Education Program, Michigan Heart Association Stroke Council, Schuss Mountain, Mancelona, contact: Harold Arnow, Director of Public Relations, MHA, 16310 W. Twelve Mile Road, P.O. Box LV-160, Southfield, 48076

SEPT. 13—MSMS Council, MSMS Headquarters, contact: Warren Tryloff, MSMS director

SEPT. 14—Second Annual Research Forum, Michigan Heart Association, at Michigan State University, contact: Harold Arnow, Director of Public Relations, Michigan Heart Association, 16310 W. Twelve Mile Road, P.O. Box LV-160, Southfield, 48076

SEPT. 16-17—Leadership Training Seminar, State of Michigan Medical Assistants, Hospitality Inn, Lansing, contact: Dorothy Brandis, 401 W. Greenlawn, Lansing, 48910

SEPT. 21-24—Michigan Regional Meeting, American College of Physicians and Michigan Society of Internal Medicine, Otsego Ski Club, Gaylord, contact. Muir Clapper, MD, ACP governor for Michigan, Wayne State University School of Medicine, 540 E. Canfield, Detroit, 48201

OCT. 1 AND 4—The Council, Sheraton-Cadillac Hotel, Detroit, contact: Warren F. Tryloff, MSMS director

OCT. 1-5—107th Annual Session of the Michigan State Medical Society, Sheraton-Cadillac Hotel, Detroit, contact: Helen Schulte, MSMS Headquarters

OCT. 5—Annual Meeting, Michigan Division, American Cancer Society, Olds Plaza Hotel, Lansing, contact: Arthur L. Crampton, executive vice president, 1205 E. Saginaw St., Lansing, 48906

NOV. 8—The Council, special meeting, noon, MSMS Headquarters, contact: Warren F. Tryloff, MSMS director

DEC. 6—The Council, MSMS Headquarters, contact: Warren F. Tryloff, MSMS director

92 medical students placed by SAMA-MECO in Michigan towns

By Jeanne Smith
MSMS Communications Department

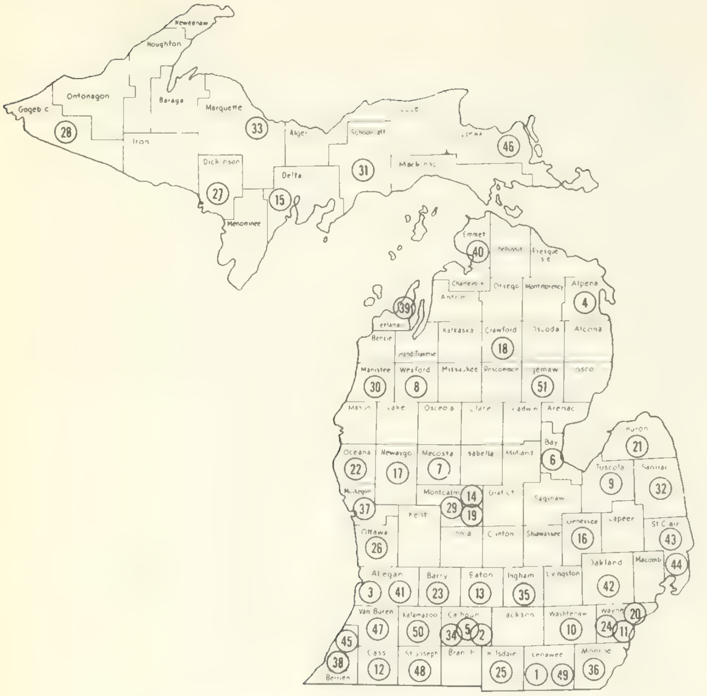
Ninety-two future physicians are learning about health care in communities throughout Michigan this summer in the third year of a project coordinated by the Michigan State Medical Society.

Michigan participation in the Student American Medical Association Project for Medical Education and Community Orientation is the second greatest in the nation. It has grown from 1970, when eleven medical students took part, to provide a program spread throughout the State of Michigan, as shown on the map. MSMS participation is a project of its Education Liaison Committee, chaired by Brock E. Brush, MD, of Detroit.

The program is designed to provide an educational experience for students and to introduce them to medical practice in Michigan communities.

The students, from medical schools at Wayne State University, the University of Michigan and Michigan State University, are participating in programs at 58 hospitals in 51 communities. Practicing physicians are supervising programs for the students, with hospitals providing stipends and room and board for them.

One of the students will be reporting on his own summer experiences in a later issue of *Michigan Medicine*. He is Bryan P. Shumaker of Southfield, coordinator for participation by MSU students, who is spending the summer in Alpena.



Locations of 1972 SAMA-MECO Programs

KEY

1. Adrian
2. Albion
3. Allegan
4. Alpena
5. Battle Creek
6. Bay City
7. Big Rapids
8. Cadillac
9. Cass City
10. Chelsea
11. Detroit
12. Dowagiac
13. Eaton Rapids
14. Edmore
15. Escanaba
16. Flint
17. Fremont
18. Grayling
19. Greenville
20. Grosse Pte Farms
21. Harbor Beach
22. Hart
23. Hastings
24. Highland Park
25. Hillsdale
26. Holland
27. Iron Mountain
28. Ironwood
29. Lakeview
30. Manistee
31. Manistique
32. Marlette
33. Marquette
34. Marshall
35. Mason
36. Monroe
37. Muskegon
38. Niles
39. Northport
40. Petoskey
41. Plainwell
42. Pontiac
43. Port Huron
44. St. Clair
45. St. Joseph
46. Sault Ste. Marie
47. South Haven
48. Sturgis
49. Tecumseh
50. Vicksburg
51. West Branch

1972 Participating Hospitals and Medical Students
Student American Medical Association Project for Medical Education and Community Orientation
coordinated by the Michigan State Medical Society

Hospital	**Physician Prog. Director**	**Student (and School)**	**Student's Home Town**
Emma Bixby, Adrian	Richard Coak, MD	Thomas Carzoli (Wayne State U)	Detroit
Albion Community	Miriam S. Daly, MD	Suzanne Hammer (Michigan State U.)	Northport
	Ralph Cram, MD	John A. Raymond (U. of Michigan)	Jackson
Allegan General	H. E. Schneiter, MD	Henry Peter Hammersmith (W)	Grand Rapids
Alpena General	Frederick C. O'Dell, MD	Bryan P. Shumaker (MSU)	Southfield
Community, Battle Creek	Alfred Hamady, MD	David Hammond (MSU)	Battle Creek
		Larry A. Ulrey (W)	Detroit
Leila Y. Post Montgomery, Battle Creek	John G. Girardot, MD	Ronald C. Zajac (W)	Hamtramck
		Bernard J. Silver (M)	Wyandotte
Mercy and General, Bay City	Paul W. Rowe, MD	Thomas D. Coates (M)	Bay City
		Richard M. Czop (MSU)	Detroit
		Michael Eldredge (W)	Grosse Ile
		Allen Michael Ford (W)	Detroit
		Walter J. Gruber, Jr. (W)	Bay City
		William G. Keating (MSU)	Detroit
		Stephen A. Morris (M)	Midland
		Douglas R. Schreiber (W)	Midland
Community, Big Rapids	Leland A. Hickox, MD	Ellen M. Brady (W)	Barryton
Mercy, Cadillac	Kenneth A. Kleyn, MD	Thomas G. Gaylord (M)	Farmington
		William J. Reitmeyer (MSU)	Cadillac
		Bernard N. Stulberg (M)	Kalamazoo

Hospital	Physician Prog. Director	Student (and School)	Student's Home Town
Hills and Dales General, Cass City	James Ballard, MD	Jonathan Kaner (M)	Southfield
Chelsea Community	Michael Papo, MD	Thomas V. Colby (M)	Amherst, Mass.
		Allan J. Collins (W)	Ann Arbor
		Edward R. O'Malley (M)	Detroit
		David M. Saarinen (M)	L'Anse
Alexander Blain Memorial, Detroit	Alexander Blain, III, MD	Millard R. Golusin (W)	Grosse Pointe Farms
		Robert L. Vollbracht (W)	St. Johns
Hutzel, Detroit	Robert E. Mack, MD	Herbert L. Baker (M)	Detroit
		Jerry Ray Jackson (MSU)	Detroit
Lee Memorial, Dowagiac	Henry V. Guzzo, MD	Mary Lou Daoust (W)	Dearborn Heights
		Donna Nissley (W)	Rochester
Eaton Rapids Community	Herman VanArk, MD	John Love (M)	Birmingham
Tri-County Comm., Edmore	Myron G. Becker, MD Orhan Baybura, MD L. W. Putzig, MD K. C. Sun, MD	David Deitrick (W)	Lansing
St. Francis, Escanaba	James Dehlin, MD	Christine Angeles (M)	Royal Oak
McLaren General, Flint	Nancy E. Furstenberg, MD	Ray H. Littleton (M)	Detroit
		William Sharp (M)	Detroit
		Michela Zbogar (W)	Flint
St. Joseph, Flint	Lewis E. Simoni, MD	Douglas A. Krause (MSU)	Armada
		Corrine M. Nellis (M)	Harper Woods
Gerber Memorial, Fremont	Robert E. Paxton, MD	Mary Therese Meistas (M)	Grand Rapids
Mercy, Grayling	Donald D. Burkley, MD	Jim Blechman (W)	Oak Park
United Memorial, Greenville	Ahmad Younis, MD	Patricia C. Trierweiler (M)	Ionia
Cottage, Grosse Pointe Farms	Walter F. Kujawski, MD	Peter Dawson Hauslein (MSU)	St. Clair Shores
		David J. Kearney (W)	Wyandotte
Harbor Beach Community, Harbor Beach	C. W. Oakes, MD	John David Fachnie (W)	Pleasant Ridge
Oceana, Hart	J. M. Holbrook, MD	Allan D. Nelson (W)	Dearborn
Pennock, Hastings	Larry Blair, MD	James W. Roberts (W)	Ypsilanti
Highland Park General	Jack Shapiro, MD	Mark Campbell (W)	Farmington
		Mark L. Grobelny (MSU)	Dearborn
		David E. Whitney (MSU)	Detroit
Hillsdale Community Health Center	Arthur Strom, MD	John Baselle (W)	Hillsdale
		Jay Eugene Krauss, Jr. (W)	Reading
Holland City	Robert Albers, MD	James W. Girardy (W)	Lathrup Village
Dickinson County, Iron Mountain	Robert L. Anderson, MD	Reena Yonkosky (MSU)	Ironwood
Grand View, Ironwood	Florian J. Santini, MD	Roman Glamb (M)	Detroit
Kelsey Memorial, Lakeview	W. B. Bennett, MD	Sim S. Galazka (M)	Dearborn Heights
West Shore, Manistee	Robert R. Garneau, MD	Theodore N. Batzer (W)	Manistee
Schoolcraft Memorial, Manistique	Larry J. Sell, MD	Robert Jean (MSU)	Nadeau
		Joseph Oyer (MSU)	East Lansing
St. Mary's Marquette	Robert Berry, MD	James C. Sonnemann (M)	Houghton
Oaklawn, Marshall	H. E. Humphrey, MD	Alfred Guerrero (M)	Wayne
Mason General	Vincent Guarnaccia, MD	Stephen Schondelmayer (MSU)	Hastings
Memorial and Mercy, Monroe	Thomas H. Snider, MD	Paul G. Gubbini (M)	Monroe
		Ervin Arthur Hire, Jr. (W)	Mt. Clemens
		Michael E. Holda (W)	Dearborn Heights
Hackley, Muskegon	Austin Aardema, MD	Harold Friedl (M)	Grand Rapids
		Gary Gerhard (MSU)	Portage
Mercy, Muskegon	I. J. Kleaveland, MD	John Kemink (M)	Grand Rapids
		David Stein (W)	Muskegon
Pawating, Niles	John Doolittle, MD	Bryan J. Dunlop (M)	Coloma
Leelanau, Northport	Dwight M. Schroeder, MD	Randall L. Rasmussen (W)	Traverse City
Pipp Community, Plainwell	Van O. Keeler, MD	Joseph R. Montante (W)	Orchard Lake
Little Traverse, Petoskey	J. H. Webster, MD	Herbert Hamel (MSU)	St. Ignace
		Michael J. Ptasnik (MSU)	Cheboygan
Marlette Community	Raymond Winfield, MD	H. Paul Runnels (W)	New Carlisle, Ind.
Lockwood-Mac Donald, Petoskey	John L. Shields, MD	Marc Meisner (M)	Huntington Woods
Pontiac General	Robert T. Lyons, MD	James A. Petteway (MSU)	Pontiac
		Stephen J. Waszak (M)	Troy
Port Huron General	A. C. Gholz, MD	Daniel C. Luebke (MSU)	Port Huron
		Kurt Richardson (MSU)	Port Huron
River District, St. Clair	Harry E. Mayhew, MD	Philip John Glengary (M)	Detroit
		Gregory Paul Sutton (M)	South Bend, Ind.
Memorial, St. Joseph	Robert L. Green, MD	Barbara J. Carpenter (W)	Mt. Clemens
		Michael D. Miller (W)	St. Joseph
Chippewa Co. War Memorial, Sault Ste. Marie	Donald D. Finlayson, MD	R. William Holden (W)	Watervliet
South Haven Community	Joseph E. Cooper, MD	Michael S. Berlin (M)	Southfield
		Theodore L. Stringer (M)	East Lansing
Sturgis Memorial	Robert Lewis, MD	John A. Moss (W)	Sturgis
Herrick Memorial, Tecumseh	Carlton L. Cook, MD	Timothy K. Dickinson (W)	Tecumseh
Franklin Community, Vicksburg	Lloyd E. Appell, MD	Steven Jerry Danek (W)	Owosso
Tolfree Memorial, West Branch	Howard Van Oosten, MD	Jay F. McAuliffe (M)	Birmingham

MSMS encouraging consumer comittees of component societies

Efforts are underway by several component medical societies to establish "consumer committees" as local advisory groups.

Guidance is being given the interested county medical societies by the MSMS Department of Communications and the MSMS Committee on Public Relations. The Committee recently wrote to the 55 component society presidents urging the establishment of such consumer committees as recommended by the fall House of Delegates.

Resolution #28 resolved that MSMS request each component society to appoint and activate a consumer committee in an attempt to "create a two-way communications pathway between the consumer and the profession."

"We feel this project is very important," says Thomas R. Berglund, MD, PR chairman.

Many of the delegates in Grand Rapids last October thought the idea had considerable merit. The need was seen to work in this new way to help improve the understanding that the public has about doctors.

The resolution, developed a year ago by the Public Relations Committee, visualized that each county would select local citizens for an advisory committee. Regular meetings would be held to discuss various situations and information would be made available to the citizen committee. As situations arose when the medical profession might have a negative press, it was hoped that the consumer committee would issue a statement "to set the record straight." The resolution explained the idea by saying such "lay citizens, speaking for the profession, are vastly more impressive and their effect more pronounced."

The resolution further instructed MSMS to develop a state-wide committee from the various local consumer committees.

Further progress will be reported in future issues of *Michigan Medicine*.

MICHIGAN
DEPARTMENT
OF PUBLIC
HEALTH

Monthly Surveillance Report

Cases of Certain Diseases Reported
To the Michigan Department of Public Health
For the Five-Week Period Ending June 2, 1972

	1972 This 5-Week Period	1971 Same 5-Week Period	1972 Total To Above Date	1971 Total Same Date	Total Cases for 1971
Rubella	296	757	1,071	2,136	2,955
Congenital Rubella Syndrome	0	0	0	1	1
Measles	472	699	1,511	1,464	2,659
Whooping Cough	4	12	44	45	140
Diphtheria	0	0	1	0	1
Mumps	497	1,838	2,223	8,175	10,748
Scarlet Fever & Strep Sore Throat	1,233	1,032	6,629*	6,705	11,244
Tetanus	1	0	1	0	7
Poliomyelitis (paralytic)	0	0	0	0	0
Hepatitis	421	530	1,974	2,273	4,828
Salmonellosis (other than S. typhi)	84	58	310	265	691
Typhoid Fever (S. typhi)	1	0	4	2	10
Shigellosis	47	7	216*	73	295
Aseptic Meningitis	7	11	30	50	239
Encephalitis	8	11	33	54	108
Meningococcic Meningitis	7	10	27	42	64
H. Influenza Meningitis	7	8	34	34	82
Tuberculosis	195	206	803	832	1,824
Syphilis	505	449	2,171	1,732	4,689
Gonorrhea	2,180	1,996	9,253	8,297	22,115

Information can be supplied by the local health department on the local incidence of disease.

Maurice Reizen, M.D., Director
Michigan Department of Public Health

* Corrected totals

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Indications: For the treatment of trichomoniasis in both male and female patients and the sexual partners of patients with a recurrence of the infection provided trichomonads have been demonstrated by wet smear or culture. The oral form is indicated also for intestinal amebiasis and amebic liver abscess.

Contraindications: Evidence or history of blood dyscrasia, active organic disease of the CNS, the first trimester of pregnancy and a history of hypersensitivity to metronidazole.

Warnings: Use with discretion during the second and third trimesters of pregnancy and restrict to those pregnant patients not cured by topical measures. Flagyl (metronidazole) is secreted in the breast milk of nursing mothers. It is not known whether this can be injurious to the newborn.

Precautions: Mild leukopenia has been reported during Flagyl use; total and differential leukocyte counts are recommended before and after treatment with the drug, especially if a second course is necessary. Avoid alcoholic beverages during Flagyl therapy because abdominal cramps, vomiting and flushing may occur. Discontinue Flagyl promptly if abnormal neurologic signs occur. Exacerbation of moniliasis may occur. In amebic liver abscess, aspirate pus during metronidazole therapy.

Adverse Reactions: Nausea, headache, anorexia, vomiting, diarrhea, epigastric distress, abdominal cramping, constipation, a metallic, sharp and unpleasant taste, furry or sore tongue, glossitis and stomatitis possibly associated with a sudden overgrowth of *Monilia*, exacerbation of vaginal moniliasis, an occasional reversible moderate leukopenia, dizziness, vertigo, incoordination and ataxia, numbness or paresthesia of an extremity, fleeting joint pains, confusion, irritability, depression, insomnia, mild erythematous eruptions, "weakness," urticaria, flushing, dryness of the mouth, vagina or vulva, pruritus, dysuria, cystitis, a sense of pelvic pressure, dyspareunia, fever, polyuria, incontinence, decrease of libido, nasal congestion, proctitis, pyuria and darkened urine have occurred in patients receiving the drug. Patients receiving Flagyl may experience abdominal distress, nausea, vomiting or headache if alcoholic beverages are consumed. The taste of alcoholic beverages may also be modified. Flattening of the T wave may be seen in EKG tracings.

Dosage and Administration

For Trichomoniasis. In the Female: One 250-mg. tablet orally three times daily for ten days. Courses may be repeated if required in especially stubborn cases; in such patients an interval of four to six weeks between courses and total and differential leukocyte counts before, during, and after treatment are recommended. Vaginal inserts of 500 mg. are available for use, particularly in stubborn cases. *When the vaginal inserts are used,* one 500-mg. insert is placed high in the vaginal vault each day for ten days and the oral dosage is reduced to two 250-mg. tablets daily during the ten-day course of treatment. Do not use the vaginal inserts as the sole form of therapy. *In the Male:* Prescribe Flagyl only when trichomonads are demonstrated in the urogenital tract, one 250-mg. tablet two times daily for ten days. Flagyl should be taken by both partners over the same ten-day period when it is prescribed for the male in conjunction with the treatment of his female partner.

For Amebiasis. Adults: For acute intestinal amebiasis, 750 mg. orally three times daily for 5 to 10 days. For amebic liver abscess, 500 to 750 mg. orally three times daily for 5 to 10 days.

Children: 35 to 50 mg./kg. of body weight/24 hours, divided into three doses, orally for ten days.

Dosage forms:	Oral tablets	250 mg.
	Vaginal inserts	500 mg.

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***Indications:** Edema associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome; steroid-induced and idiopathic edema; edema resistant to other diuretic therapy. Also, mild to moderate hypertension.

Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired. Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, **check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently**—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Rarely, necrotizing vasculitis, paresthesias, icterus, pancreatitis, and xanthopsia have occurred with thiazides alone.

Supplied: Bottles of 100 capsules.

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IN EDEMA*—IN HYPERTENSION*

Welcome

Members of the Michigan State Medical Society join in welcoming the following new members into a progressive state medical organization. MSMS is dedicated to promoting the science and art of medicine, the protection of the public health, and the betterment of the medical profession. Each new member is encouraged to join with other MSMS members at both the local and the state levels in achieving these goals.

Romulo T. Abeuva, MD, 1521 Gull Rd., Kalamazoo 49001
John R. Ackermann, MD, Dept. of Surgery—MSU, East Lansing 48823
Alfredo B. Arriola, MD, 888 Chalmers, Detroit 48215
Archie W. Bedell, MD, 15545 Mack Ave., Detroit 48224
Wm. Michael Bremer, MD, 788 Columbia Ave., Holland 49423
Sajal P. L. Choudhury, MD, Detroit Memorial Hospital, Detroit 48226
Paul J. Christenson, MD, 414 Washington, Grand Haven 49417
Margo P. Cohen, MD, Detroit General Hosp., Detroit 48226
James U. Collins, MD, 425 Cherry St., S.E., Grand Rapids 49502
Jack O. Derks, MD, 336 W. 28th St., Holland 49423
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(Continued on page 632)

SYNTHROID
T_4

RADAR
AHEAD

HISTORICAL
MARKER

T_4 IS THE PREDICTABLE HORMONE BECAUSE IT LOVES PROTEIN.

SYNTHROID® (sodium levothyroxine) is pure synthetic T_4, the major circulating thyroid hormone. It is reliable to use because of its affinity for protein-binding sites in the blood. T_3 is more fickle. Sometimes it binds. Sometimes it doesn't. T_4 more *predictably* binds to protein.

Synthroid®
(sodium levothyroxine)

ALL THYROID-FUNCTION TESTS ARE USEFUL IN MONITORING SYNTHROID THERAPY.

No calculations are needed, test interpretation is simple.

Any of the commonly used T_4 thyroid function tests (P.B.I., T_4 By Column, Murphy-Pattee, Free Thyroxine) are useful in monitoring patients on T_4 because they *all* measure T_4. Patients on SYNTHROID are thereby easy to monitor because their results will fall within predictable, elevated test ranges. Of course, clinical assessment is the best criterion of the thyroid status of the drug-treated patient.

TWO GOOD REASONS WHY THE ROAD TO NORMALIZED THYROID STATUS IS SO SMOOTH FOR THE SYNTHROID PATIENT.

(1) The onset of action of T_4 is gradual. It has a long in vivo "half-life" of over six days. (Occasional missed doses or accidental double-doses are of less concern because of this factor)[1]; (2) since SYNTHROID contains only T_4, the potential for metabolic surges traceable to more potent iodides (T_3) is eliminated.

TEST	HYPOTHYROID	SYNTHROID THERAPEUTIC NORMAL
P.B.I.	Less than 4 mcg %	6-10 mcg %
T_4 By Column	Less than 3 mcg %	7-9 mcg %
T_3 (Resin)	Less than 25%	27-35%
T_3 (Red Cell)	Less than 11%	11.5-18%
Free Thyroxine	Less than 0.7 nanograms %	0.7-2.5 nanograms %
Murphy-Pattee	Less than 2.9 mcg %	4-11 mcg %

Choose the Smooth Road ...to thyroid replacement therapy

---

1. Latiolais, C. J., and Berry, C. C.: Misuse of Prescription Medications by Outpatients, *Drug Intelligence & Clin. Pharm.* 3:270-7, 1969.

MERGING
TRAFFIC

IY DOES SYNTHROID ST LESS THAN NTHETIC DRUGS NTAINING T_3?

simple. T_3 costs more to make
hetically than does T_4. So it is
homically necessary for a
hetic thyroid medication
aining T_3 to cost more than
containing T_4 alone. Synthetic
binations cost patients nearly
more than SYNTHROID[3]
ause the T_3 costs more to start
; also there is the additional
ense of formulating a tablet
aining two active ingredients.

erican Druggist BLUEBOOK, March, 1971.

KNOWLEDGE OF THE '70's CHALLENGES CUSTOMS CONCERNING DESICCATED THYROID DRUGS.

In the past, desiccated thyroid produced from animal glands was considered "good, and cheap." We now know that improved products are available and the price difference has narrowed to the point of being inconsequential. (SYNTHROID, for instance, costs patients about a penny a day more than brands of desiccated thyroid.)

What does this additional $3.65 a year buy the patient? Quite a bit in terms of quality, reliability and service.

SWITCHING PATIENTS TO SYNTHROID IS EASY.

Switching present patients to SYNTHROID (or starting new ones) is a simple matter. SYNTHROID is available in the widest range of dosage strengths of any thyroid drug. Seven scored, color-coded tablet strengths are available plus a lyophilized injectable form for emergency or postoperative uses.

RESPONSE, RELIABILITY, SERVICE—COMPARISON OF FIVE PARAMETERS

ARAMETERS	DESICCATED THYROID U.S.P.	SYNTHROID® (sodium levothyroxine)
OURCE OF HORMONE	Animal glands (swine, sheep, cows). Hormone content of glands and ratio of T_3-T_4 varies by type of animal, season in which gland is harvested, and diet of animal.[1,2,3,4,5]	Synthetically derived pure crystalline hormone. Because no animal protein is present, no objectionable odor occurs upon aging.
ENERAL ASSAY TECHNIQUE	"Its major disadvantage is inadequate standardization of hormonal content."[8]	Unlike desiccated thyroid U.S.P., thyroxine does not require biologic standardization to establish its potency.[2,6] Crystalline T_4 is used. Purity is verified by paper chromatography. Content of tablets is standardized by weight.
LINICAL RESPONSE	"T_3 and T_4 ratio varies according to gland source. Fluctuations in response can occur. Potency can vary."[3]	"Sodium levothyroxine has been extensively used with satisfaction and is widely held to be superior to (desiccated) thyroid."[7] "There are well documented examples of patients who failed to respond satisfactorily to desiccated thyroid but subsequently responded to (sodium-1) thyroxine."[4]
REDICTABILITY	Failure of thyroid U.S.P. treated patients to show clinical improvement and/or lack of correlation in clinical findings to thyroid function test results has been frequently discussed in the literature.[8,9,10,11,12,13,14,15,16] Regardless of which factor or factors accounts for this phenomenon the fact remains that discrepancies do occur.	Test results predictably elevated. ". . . oral potency of this material is attested to by a uniformly good clinical response corroborated by a prompt and sustained increase in the serum PBI levels."[16]

Mangieri, C. N. and Lund, M. H.: Potency of United States Pharmacopeia desiccated thyroid tablets as determined by the antigoitrogenic assay in rats, J. Clin. Endocrinol. Metab., *30*:102-4, 1970.
Lavietes, P. H. and Epstein, F. H.: Thyroid therapy of myxedema: a comparison of various agents with a note on the composition of thyroid secretion in man, Ann. Intern. Med., *60*:79-87, 1964.
Armour Pharmaceutical Company—discussing Armour Thyroid, PROLOID, other generics. Literature No. 21329—274—YZ—1—1M 2/71.
Abelson, D. M.: Hypothyroidism, Med. Sci., *10*:442-8, 1961.
McGregor, A. G.: Why does anybody use thyroid B. P.?, Lancet, *1*: 329-32, 1961.
Hart, F. D. and Maclagen, N. F.: Oral thyroxine in treatment of myxedema, Brit. Med. J., *1*:512-8, 1950.
Goodman, L. S. and Gilman, A.: The Pharmacological Basis of Therapeutics, 4th Ed. p. 1479, New York: Macmillan, 1970.
Harrison, T. R., et al.: Principles of Internal Medicine, 6th ed. p. 456. Philadelphia: Blakiston, 1970.
9. Braverman, L. E. and Ingbar, S. H.: Anomalous effects of certain preparations of desiccated thyroid on serum protein-bound iodine, New Eng. J. Med., *270*:439-42, 1964.
10. Green, W. L.: Guidelines for the treatment of myxedema, Med. Clin. N. Amer., *52*:432-50, 1968.
11. Dowling, J. T.: Hypothyroidism in Current Therapy, Conn. H. F., ed. pp. 345-7, Philadelphia: Saunders, 1964.
12. Dunn. J. T.: Excessive dose of thyroid medication in hypothyroidism, J. Am. Med. Assn., *216*:152, 1971.
13. Runyan, J. W.: Hypothyroidism and myxedema, J. Tenn. State Med. Assn., *56*:391-4, 1963.
14. Albright, E. C.: Use and abuse of thyroid hormones, comments on treatment, Marquette University, Milwaukee, Wisc.
15. Catz, B.: Ginsburg, E. and Salenger, S.: Clinically inactive thyroid U.S.P.: a preliminary report, New Eng. J. Med., *266*:136-7, 1962.
16. Bartuska, D. G., et al.: Desiccated thyroid U.S.P. or sodium l-thyroxine?, J. Amer. Med. Women's Assn., *21*:137-9, 1966.

PATIENTS CAN BE SUCCESSFULLY MAINTAINED ON A DRUG CONTAINING THYROXINE ALONE.

Thyroxine (T_4) is, as you know, the major circulating hormone produced by the thyroid gland. T_3 is also produced, in smaller amounts, and is active at the cellular level. For years it has been a working hypothesis among endocrinologists that T_4 is converted by the body to T_3. In 1970 this process, called "deiodination," was demonstrated by Braverman, Ingbar, and Sterling[2]. T_4 does convert to T_3, though the precise quantities are still being studied.

The conversion has been clinically demonstrated during the administration of T_4 to athyrotic patients. Their thyroid status is normalized on SYNTHROID alone, yet the presence of T_3 in these patients has been clearly shown.

REST
AREA
1/2 MILE

CONSIDERATE LONG-TERM THERAPY FOR THE PATIENT.

Predictable patient response, of course, is more important than price. You do get complete clinical response with the single-entity synthetic, SYNTHROID. And, at a reasonable cost to the patient. In some short term situations, T_3 drugs can be useful but, in long term therapy, the smooth road provided by SYNTHROID may be the better route.

SYNTHROID, with its smooth road to complete thyroid replacement therapy, has been selected for more patients in the United States and Canada than any other brand of thyroid medication.

AS WITH ANY THYROID PREPARATION, CAUTIOUS OBSERVATION OF TH PATIENT DURING TH BEGINNING OF THERAPY WILL ALER THE PHYSICIAN TO ANY UNTOWARD EFFECTS.

Side effects, when they do occ
are related to excessive dosag
Caution should be exercised in
administering the drug to patie
with cardiovascular disease. Re
the accompanying prescribing
information for additional data
write Flint Laboratories.

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[2] Braverman, L. E., Ingbar, S. H., and Sterling, K.: Conversion of Thyroxine (T4) to Triiodothyronine (T3) in Athyreotic Human Subjects, *J. Clin. Invest.* **49**:855-64, 1970.

Choose the Smooth Road ...to thyroid replacement therapy

0.05 mg.

0.1 mg.

0.15 mg.

0.2 mg.

FREE TAB-MINDER medica
dispensers—color-coded in 4
age strengths—get patients o
a good start and encourage
ular habit patterns. Contain
4-weeks' supply of SYNTHR
and are reusable for maintena
dosage.

APPROXIMATE DOSAGE EQUIVALENTS*

			Animal Gland		
CYTOMEL (Sodium liothyronine) Synthetic T_3	EUTHROID** (Liotrix) Synthetic T_3-T_4	THYROLAR*** (Liotrix) Synthetic T_3-T_4	Desiccated (Thyroid, USP) Cow, sheep or hog thyroid	PROLOID (thyroglobulin) Frozen hog thyroid	SYNTHROID (Sodium levothyroxine) Synthetic T_4
Unscored 5 mcg.	N.A.	N.A.	unscored ¼ gr.	¼ gr.	0.025 mg.
N.A.	½	½	unscored ½ gr.	½ gr.	0.05 mg.
25 mcg.	1	1	unscored 1 gr.	1 gr.	0.1 mg.
N.A.	N.A.	N.A.	N.A.	1½ gr.	0.15 mg.
50 mcg.	2	2	unscored 2 gr.	2 gr.	0.2 mg.
N.A.	3	3	unscored 3 gr.	3 gr.	0.3 mg.
N.A.	N.A.	N.A.	unscored 5 gr.	5 gr.	0.5 mg.
N.A.	N.A.	N.A.	N.A.	N.A.	Injectable 500 mcg.

N.A. = Not Available Commercially

*Equivalents shown are chemical, and do not take into consideration individual patient variables. Clinical effect is approximate and should be monitored when converting a patient to SYNTHROID. This is particularly important in patients previously on desiccated thyroid. In these patients, lower doses of SYNTHROID may produce the same metabolic effect.

**Euthroid (#1 tablet) contains 60 mcg. of T_4 and 15 mcg. of T_3.

**Thyrolar (#1 tablet) contains 50 mcg. of T_4 and 12.5 mcg. of T_3.

Synthroid®
(sodium levothyroxine)

TOLL
AHEAD
SYNTHROID
T4
YIELD
R
R
BUMP
STOP

Indications: SYNTHROID (sodium levothyroxine) is specific replacement therapy for diminished or absent thyroid function resulting from primary or secondary atrophy of the gland, congenital defect, surgery, excessive radiation, or antithyroid drugs. Indications for SYNTHROID (sodium levothyroxine) **Tablets** include myxedema, hypothyroidism without myxedema, hypothyroidism in pregnancy, pediatric and geriatric hypothyroidism, hypopituitary hypothyroidism, simple (nontoxic) goiter, and reproductive disorders associated with hypothyroidism. SYNTHROID (sodium levothyroxine) **for Injection** is indicated for intravenous use in myxedematous coma and other thyroid dysfunctions where rapid replacement of the hormone is required. The injection is also indicated for intramuscular use in cases where the oral route is suspect or contraindicated due to existing conditions or to absorption defects, and when a rapid onset of effect is not desired.

Precautions: As with other thyroid preparations, an overdosage may cause diarrhea or cramps, nervousness, tremors, tachycardia, vomiting and continued weight loss. These effects may begin after four or five days or may not become apparent for one to three weeks. Patients receiving the drug should be observed closely for signs of thyrotoxicosis. If indications of overdosage appear, discontinue medication for 2-6 days, then resume at a lower dosage level. In patients with diabetes mellitus, careful observations should be made for changes in insulin or other antidiabetic drug dosage requirements. If hypothyroidism is accompanied by adrenal insufficiency, as Addison's Disease (chronic subcortical insufficiency), Simmonds's Disease (panhypopituitarism) or Cushing's syndrome (hyperadrenalism), these dysfunctions must be corrected prior to and during SYNTHROID (sodium levothyroxine) administration. The drug should be administered with caution to patients with cardiovascular disease; development of chest pains or other aggravations of cardiovascular disease requires a reduction in dosage.

Contraindications: Thyrotoxicosis, acute myocardial infarction. **Side effects:** The effects of SYNTHROID (sodium levothyroxine) therapy are slow in being manifested. Side effects, when they do occur, are secondary to increased rates of body metabolism; sweating, heart palpitations with or without pain, leg cramps, and weight loss. Diarrhea, vomiting, and nervousness have also been observed. Myxedematous patients with heart disease have died from abrupt increases in dosage of thyroid drugs. Careful observation of the patient during the beginning of any thyroid therapy will alert the physician to any untoward effects.

In most cases with side effects, a reduction of dosage followed by a more gradual adjustment upward will result in a more accurate indication of the patient's dosage requirements without the appearance of side effects.

Dosage and Administration: The activity of a 0.1 mg. SYNTHROID (sodium levothyroxine) TABLET is equivalent to approximately one grain thyroid, U.S.P. Administer SYNTHROID tablets as a single daily dose, preferably after breakfast. In hypothyroidism without myxedema, the usual initial adult dose is 0.1 mg. daily, and may be increased by 0.1 mg. every 30 days until proper metabolic balance is attained. Clinical evaluation should be made monthly and PBI measurements about every 90 days. Final maintenance dosage will usually range from 0.2-0.4 mg. daily. In adult myxedema, starting dose should be 0.025 mg. daily. The dose may be increased to 0.05 mg. after two weeks and to 0.1 mg. at the end of a second two weeks. The daily dose may be further increased at two-month intervals by 0.1 mg. until the optimum maintenance dose is reached (0.1-1.0 mg. daily).

Supplied: Tablets: 0.025 mg., 0.05 mg., 0.1 mg., 0.15 mg., 0.2 mg., 0.3 mg., 0.5 mg., scored and color-coded, in bottles of 100, 500, and 1000. Injection: 500 mcg. lyophilized active ingredient and 10 mg. of Mannitol, N.F., in 10 ml. single-dose vial, with 5 ml. vial of Sodium Chloride Injection, U.S.P., as a diluent. SYNTHROID (sodium levothyroxine) **for Injection** may be administered intravenously utilizing 200-400 mcg. of a solution containing 100 mcg. per ml. If significant improvement is not shown the following day, a repeat injection of 100-200 mcg. may be given.

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Morton Grove, Illinois 60053

THE FACTS ARE CLEAR AND HERE IS OUR OFFER.

Synthetic thyroid drugs are an improvement over animal gland products. Patients, even athyrotic ones, can be completely maintained on SYNTHROID (T_4) alone. Thyroid function tests are easy to interpret since they are *predictably* elevated when the patient adheres to SYNTHROID. Of all synthetic thyroid drugs, SYNTHROID is the most economical to the patient.

AA

OFFER:
Free TAB-MINDER medication dispensers to start or convert all your hypothyroid patients to SYNTHROID. Free information to physicians on role of thyroid function tests in a new booklet titled: "Guideposts to Thyroid Therapy." Ask us.

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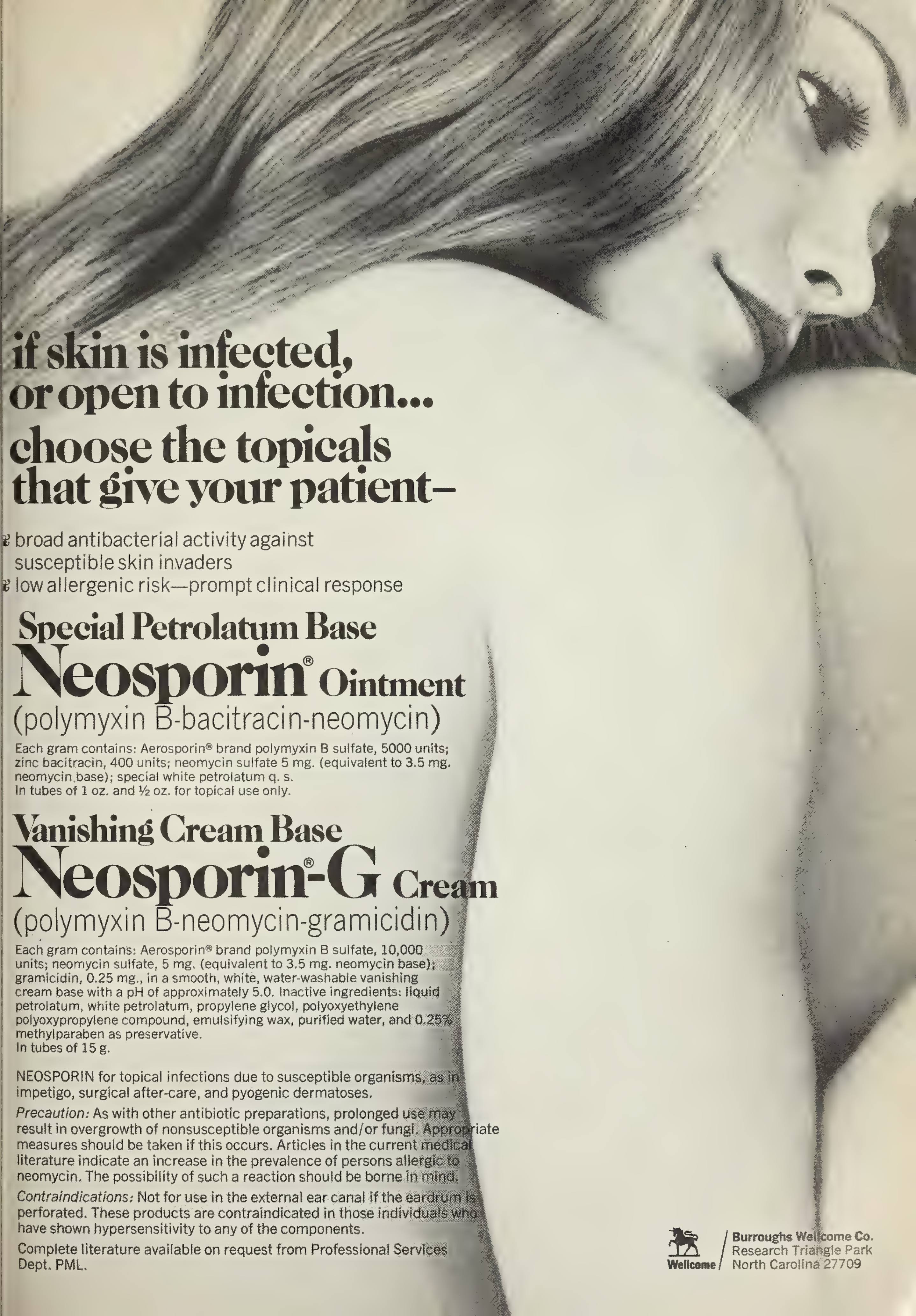
(Continued on page 638)



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choose the topicals that give your patient–

- broad antibacterial activity against susceptible skin invaders
- low allergenic risk—prompt clinical response

Special Petrolatum Base

Neosporin® Ointment

(polymyxin B-bacitracin-neomycin)

Each gram contains: Aerosporin® brand polymyxin B sulfate, 5000 units; zinc bacitracin, 400 units; neomycin sulfate 5 mg. (equivalent to 3.5 mg. neomycin base); special white petrolatum q. s.
In tubes of 1 oz. and ½ oz. for topical use only.

Vanishing Cream Base

Neosporin®-G Cream

(polymyxin B-neomycin-gramicidin)

Each gram contains: Aerosporin® brand polymyxin B sulfate, 10,000 units; neomycin sulfate, 5 mg. (equivalent to 3.5 mg. neomycin base); gramicidin, 0.25 mg., in a smooth, white, water-washable vanishing cream base with a pH of approximately 5.0. Inactive ingredients: liquid petrolatum, white petrolatum, propylene glycol, polyoxyethylene polyoxypropylene compound, emulsifying wax, purified water, and 0.25% methylparaben as preservative.
In tubes of 15 g.

NEOSPORIN for topical infections due to susceptible organisms, as in impetigo, surgical after-care, and pyogenic dermatoses.

Precaution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Contraindications: Not for use in the external ear canal if the eardrum is perforated. These products are contraindicated in those individuals who have shown hypersensitivity to any of the components.

Complete literature available on request from Professional Services Dept. PML.

Wellcome

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When you select this familiar antibiotic for IV infusion you have available a broad dosage range that hospitalized patients may need.

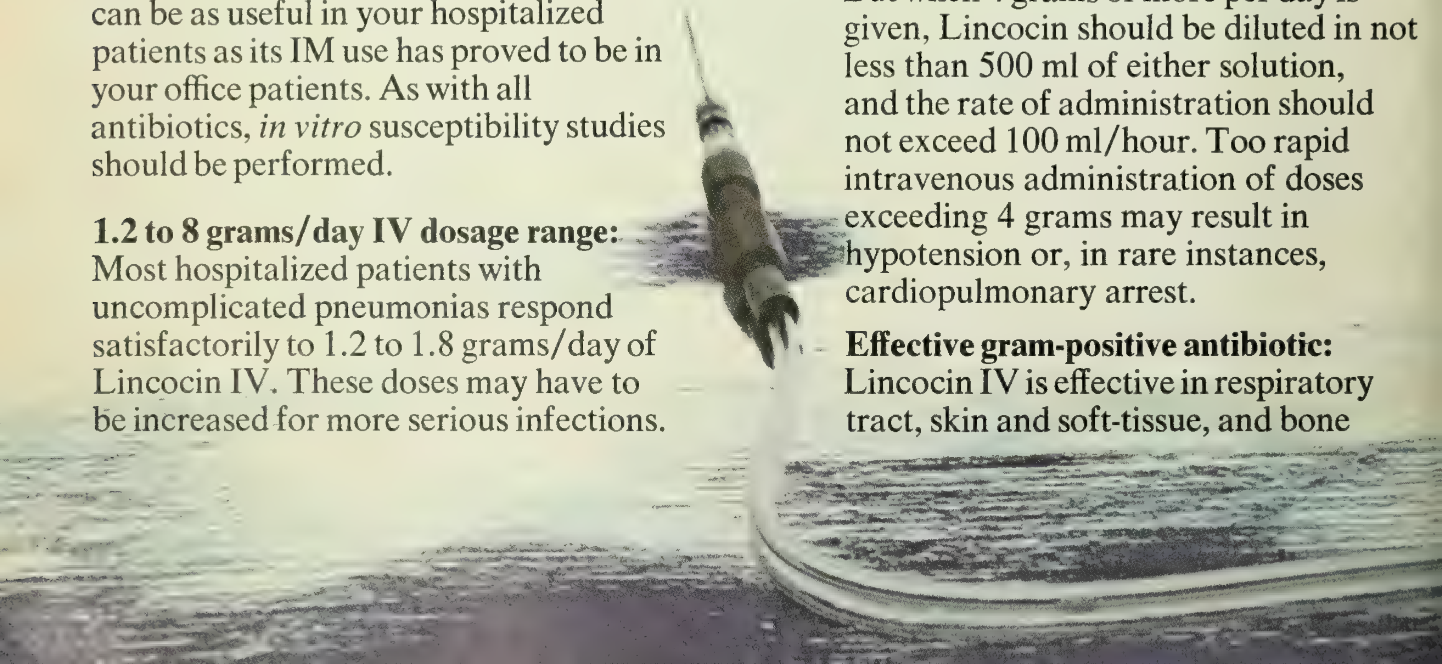
Intravenous Lincocin (lincomycin hydrochloride, Upjohn), with its 1.2 to 8 grams/day dosage range, covers many serious and even life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. Lincocin IV therefore can be as useful in your hospitalized patients as its IM use has proved to be in your office patients. As with all antibiotics, *in vitro* susceptibility studies should be performed.

1.2 to 8 grams/day IV dosage range: Most hospitalized patients with uncomplicated pneumonias respond satisfactorily to 1.2 to 1.8 grams/day of Lincocin IV. These doses may have to be increased for more serious infections.

In life-threatening situations as much as 8 grams/day has been administered intravenously to adults.

In usual IV doses, Lincocin (lincomycin hydrochloride, Upjohn) should be diluted in 250 ml or more of normal saline solution or 5% glucose in water. But when 4 grams or more per day is given, Lincocin should be diluted in not less than 500 ml of either solution, and the rate of administration should not exceed 100 ml/hour. Too rapid intravenous administration of doses exceeding 4 grams may result in hypotension or, in rare instances, cardiopulmonary arrest.

Effective gram-positive antibiotic: Lincocin IV is effective in respiratory tract, skin and soft-tissue, and bone



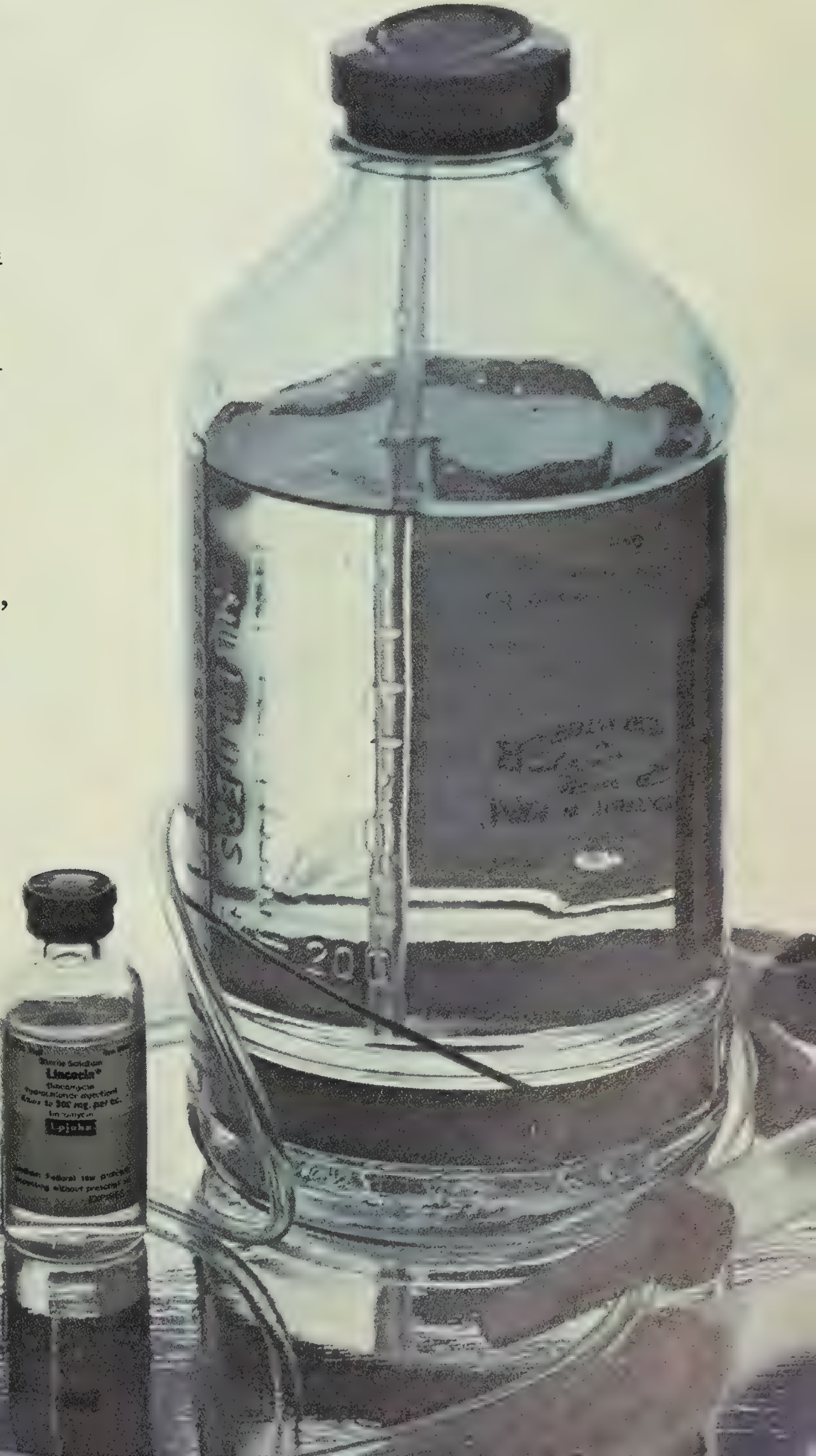
infections caused by susceptible strains of pneumococci, streptococci, and staphylococci, including penicillin-resistant strains. Staphylococcal strains resistant to Lincocin (lincomycin hydrochloride, Upjohn) have been recovered. Before initiating therapy, culture and susceptibility studies should be performed. Lincocin has proved valuable in treating patients hypersensitive to penicillin or cephalosporins, since Lincocin does not share antigenicity with these compounds. However, hypersensitivity reactions have been reported, some of these in patients known to be sensitive to penicillin.

Well tolerated at infusion site: Lincocin intravenous infusions have not produced local irritation or phlebitis, when given as recommended. Lincocin is usually well tolerated in patients who are hypersensitive to other drugs. Nevertheless, Lincocin should be used cautiously in patients with asthma or significant allergies.

In patients with impaired renal function, the recommended dose of Lincocin should be reduced to 25–30% of the dose for patients with normal kidney function. Its safety in pregnant patients and in infants ess than one month of age has not been established.

Lincocin may be used with other antimicrobial agents: Since Lincocin s stable over a wide pH range, it is suitable for incorporation in ntravenous infusions; it also may be administered concomitantly with other antimicrobial agents when indicated. However, Lincocin should not be used with erythromycin, as *in vitro* antagonism has been reported.

Lincocin®
Sterile Solution (300 mg per ml)
(lincomycin hydrochloride, Upjohn)
For further prescribing information, please see following page.



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Sterile Solution (300 mg. per ml.)

Lincocin®

(lincomycin hydrochloride, Upjohn)

Up to 8 grams per day by IV infusion for hospitalized patients with life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. As with all antibiotics, *in vitro* susceptibility studies should be performed.

Each preparation contains:	Lincomycin hydrochloride monohydrate equivalent to lincomycin base
250 mg Pediatric Capsule	250 mg
500 mg Capsule	500 mg
*Sterile Solution per 1 ml	300 mg
Syrup per 5 ml	250 mg

*Contains also: Benzyl Alcohol 9 mg; and, Water for Injection—q.s.

Lincocin (lincomycin hydrochloride) is indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed. Cross resistance has not been demonstrated with penicillin, ampicillin, cephalosporins, chloramphenicol or the tetracyclines. Some cross resistance with erythromycin has been reported. Studies indicate that Lincocin does not share antigenicity with penicillin compounds.

CONTRAINDICATIONS: History of prior hypersensitivity to lincomycin or clindamycin. Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: *CASES OF SEVERE AND PERSISTENT DIARRHEA HAVE BEEN REPORTED AND HAVE AT TIMES NECESSITATED DISCONTINUANCE OF THE DRUG. THIS DIARRHEA HAS BEEN OCCASIONALLY ASSOCIATED WITH BLOOD AND MUCUS IN THE STOOLS AND HAS AT TIMES RESULTED IN AN ACUTE COLITIS. THIS SIDE EFFECT USUALLY HAS BEEN ASSOCIATED WITH THE ORAL DOSAGE FORM BUT OCCASIONALLY HAS BEEN REPORTED FOLLOWING PARENTERAL THERAPY.* A careful inquiry should be made concerning previous sensitivities to drugs or other allergens. Safety for use in pregnancy has not been established and Lincocin (lincomycin hydrochloride) is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infections for 10 days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihistamines available for emergency treatment. *Skin and mucous membranes*—Skin rashes, urticaria, vaginitis, and rare instances of exfoliative and vesiculobullous dermatitis have been reported. *Liver*—Although no direct relationship to liver dysfunction is established, jaundice and abnormal liver function tests (particularly serum transaminase) have been observed in a few instances. *Cardiovascular*—Instances of hypotension following parenteral administration have been reported, particularly after too rapid IV administration. Rare instances of cardiopulmonary arrest have been reported after too rapid IV administration. If 4.0 grams or more administered IV, dilute in 500 ml of fluid and administer no faster than 100 ml per hour. *Special senses*—Tinnitus and vertigo have been reported occasionally. *Local reactions*—Excellent local tolerance demonstrated to intramuscularly administered Lincocin (lincomycin hydrochloride). Reports of pain following injection have been infrequent. Intravenous administration of Lincocin in 250 to 500 ml of 5% glucose in distilled water or normal saline has produced no local irritation or phlebitis.

HOW SUPPLIED: *250 mg* and *500 mg* Capsules—bottles of 24 and 100. *Sterile Solution, 300 mg per ml*—2 and 10 ml vials and 2 ml syringe. *Syrup, 250 mg per 5 m*—60 ml and pint bottles.

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Your opinion please

MSMS asked the question:

> *"What new services would you recommend that MSMS provide for its members? Why? This subject currently is of top priority with MSMS, and is the topic of study by one of the two subcommittees of the MSMS Committee on Planning and Priorities, Work Group A of the committee, led by Ralph Green, MD, Oak Park, which is evaluating the opinions of membership services expressed by MSMS members in the recent Alexander Grant Study.*

These doctors replied:

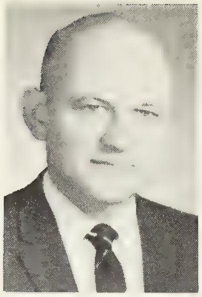
Max E. Dodds, MD
Flint

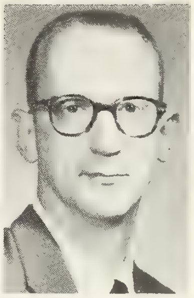
There are several hard problems in the economic and organizational areas getting deserved attention. These include the difficulties involved with liability, governmental encroachment upon practice, cost of medical care as well as cost of medical education, and newer ideas about methods for delivery of health care.

To these I would like to add an additional level of concern. Could MSMS be effective as a source of information regarding the true state of medical care and practice in Michigan? Pre-Medicare we told ourselves that with the amount of free work we were willing to do, no person was denied care. Now we think everyone is covered by some form of insured care. Exceptions keep surfacing and it is evident that for a variety of reasons, neither assumption was ever true. But can any unit of our organization give factual data as to uninsured populace, poorly administered welfare programs, and level of participation of medical installations in community health problems?

What treatment facilities are available to the people of Michigan? As various public groups and governmental agencies pursue regionalization and as area planning commissions become more effective, would it not be wise for organized medicine to be the source of information, and, thus, perhaps the effective advisor? I can only cite a brief example which may also be true of several other areas.

Cancer chemotherapy is now too sophisticated and dangerous to be carried out with an article or the PDR as sole source of information. What segment of the State would have difficulty getting adequate consultation, how can a practitioner be encouraged to use it, and what are the transportation and communication problems involved?


Doctor Dodds


Doctor Eyl

Obviously, MSMS is neither funded nor staffed to alone carry out such comprehensive studies. However, it would seem possible to strengthen our ties to the public by seeking such goals with the help of other organizations.

MSMS should be a leading influence for effective utilization of our educational facilities, and should encourage the entire profession that membership can be a means of fulfillment in the effort to work with and communicate with the public and the profession of this State.

I believe the ultimate service MSMS can provide its members is an abiding concern for health care. This is no longer limited to single patient, one symptom at a time, concern. It means searching out sources of health care problems, making evident inefficiencies and inequities in insurance coverage, insisting upon adequate funding of projects that are clearly governmental responsibility, but always remembering that this is not a union, a business, or a guild, but a profession. The claim of a profession is an assurance of trust. The patient can trust that the advice we give is the best we know for him and that the fee he paid was for that advice and that service. He can trust that he will not go from one dummy corporation to another with another fee coming back to the same person in whom he put his trust. Too much self seeking and convenience services profane the profession.

Thomas B. Eyl, MD
St. Clair

There is no *single* most effective means of improving quality and quantity of medical care. The House of Medicine alternately needs a window, a floor, a door, the furnace, the porch or the garage repaired or renewed. We are already swamped by third-party contractors of every conceivable description. We can no longer maintain our god-image, our isolationism or non-involvement with the consumer-oriented social economy of today's Space Age.

The Now approach to medical problems is a multi-disciplinary team concept. Physician's Assistants, Medexes, and increased nursing responsibility are inescapable adjuncts to effective "mass production" medical care of the present and future. Cost control experts are now essential consultants to each hospital, institutional and private medical practice. Management experts *must* streamline methods of distributing top-quality, comprehensive medical care to *every* American.

Quality control is an inseparable part of any business. Medicine, like it or not, has become a business. Simplified, standardized paperwork *must* replace the current nightmare of the Paper Octopus. Postgraduate education programs, if sufficiently available, interesting and productive, need not be mandatory. Nor need the specter of periodic re-certification constantly rear its ugly head.

The Michigan State Medical Society has made impressive strides toward these and other goals. What still remains to be done is mind-boggling. Educational, legal, financial, recreational, insurance and estate-planning assistance are desirable goals of any union. Medical societies are unions, even when called by any other name. Students, interns and residents have done us the service of calling a spade a spade. Under increasing pressures, we old fogies will soon have no choice but to follow their lead—under whatever verbose nomenclature.

Medical public relations is badly in need of immediate upgrading. Lay medical education has been almost taken over by popular books (The Doctors; The Troubled Calling; The Medical Messiahs; The Making of a Surgeon; The Final Diagnosis; Malpractice). By newspaper and magazine articles (I Am Joe's Kidney-Liver-Stomach-Spine, etc.; You and Your Heart; Never Marry A Doctor). By radio and TV (faith-healing programs; Marcus Welby; Medical Center; Doctor In The House). By movies (The New Interns; Doctors' Wives; The Hospital; The Young Doctors). Medical societies could do far more to *genuinely* educate John Q. Public. Physicians and medical societies should produce or sponsor more educational "commercials" and news articles. Able and willing doctors must be encouraged to write for the general public, as well as for their colleagues. MSMS sponsors an annual Medical Writers Conference, frequent news conferences and a weekly radio program—a step in the right direction. The American Medical Writers' Association, with local chatpers in Michigan, is actively seeking new members. Writer's Digest, 22 E. 12th St., Cincinnati 45210, is a treasure-trove of information for actual and potential writers—*including physicians*.

Another area urgently needs our attention. The Mayo Clinic, Menninger Clinic, Harvard and Tufts medical schools all report an unusually high incidence of illness among physicians. During one study of 46 practicing physicians and 79 lay controls, 36% of the physicians acknowledged misuse of alcohol or drugs, or regular use of tranquilizers. Thirty-four percent had seen a psychiatrist at least ten times. *Forty-seven percent* were divorced or unhappily married. Twice as many doctors as controls reported *two or more* of these instability symptoms. Three times as many had been hospitalized on psychiatric wards. Mayo Clinic records during a recent seven year period show one physician admitted for every 64 laymen—a significantly disproportionate ratio. Physicians have a markedly greater tendency to become depressed, to have unmet dependency needs, and to seek gratification in being "needed" by others. U.S. Census figures indicate a disturbingly high rate of formal or informal marital separations among doctors.

"Physician, Heal Thyself."

Medico·legal

The AMA's CITATION newsletter, prepared by the AMA Law Department, lists the following cases involving health personnel in Michigan. Persons interested in obtaining more information on individual cases may write MSMS headquarters.

"Guardian of incompetent
allowed access to hospital records"
Michigan Court of Appeals, June 23, 1970
from *The Citation,* March 15, 1972

"Malpractice trial juror
acquainted with patient"
Michigan Supreme Court, Nov. 9, 1971
from *The Citation,* March 15, 1972

"Physician liable
for unnecessary tests and surgery"

Michigan Court of Appeals, May 19, 1971
from the *Citation,* Feb. 15, 1972

"No proof of negligence
by periodontist"

Michigan Court of Appeals, June 24, 1971
from the *Citation,* Feb. 15, 1972

WELCOME/Continued

William H. Straub, MD, Midland Hospital, Midland 48640
Jose R. Tandoc, Jr., MD, 261 Mack Ave., Detroit 48201
John H. TenPas, MD, 1310 Wisconsin, Grand Haven 49417
Demetrio R. Timban, MD, 17220 W. Eight Mile Rd., Southfield 48075
Terry S. Vincent, MD, Park Davis & Co., P.O. Box 118, Detroit 48232
Barbara F. Wailes, MD, 3800 Woodward Ave., Detroit 48201
John G. Whitcomb, MD, Henry Ford Hosp., Detroit 48202
Clyde W. Wilcox, MD, 900 Woodward Ave., St. Joseph Mercy Hosp., Pontiac 48053
Robert K. Wise, MD, 17640 W. 12 Mile Rd., Southfield 48075
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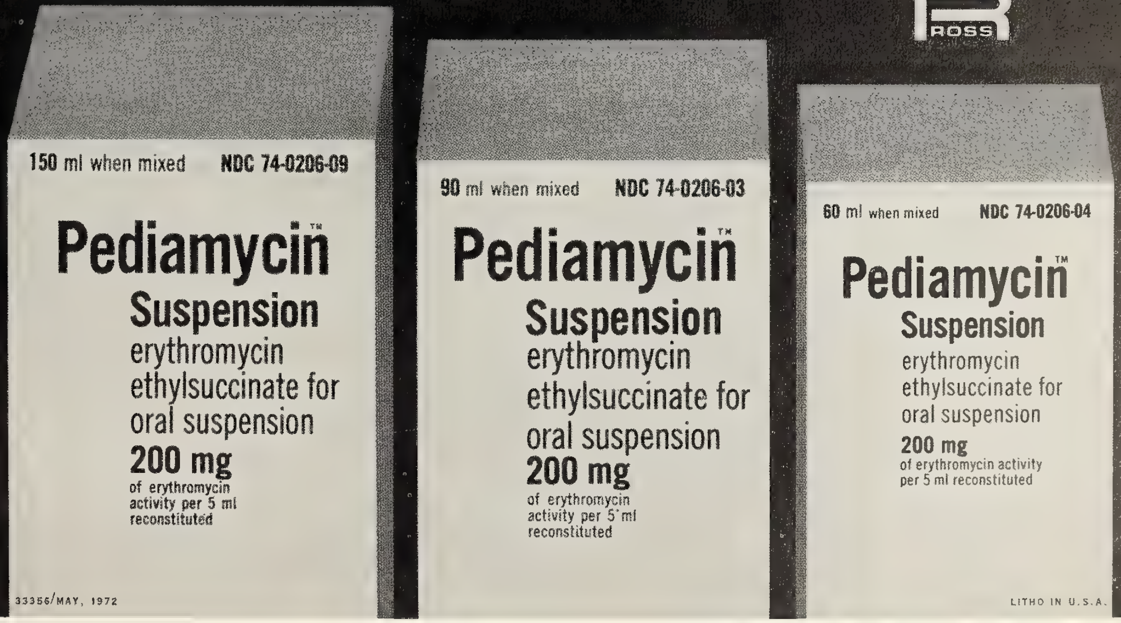
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90 ml when mixed NDC 74-0206-03
Pediamycin™
Suspension
erythromycin ethylsuccinate for oral suspension
200 mg
of erythromycin activity per 5 ml reconstituted
60 ml when mixed NDC 74-0206-04
Pediamycin™
Suspension
erythromycin ethylsuccinate for oral suspension
200 mg
of erythromycin activity per 5 ml reconstituted

33356/MAY, 1972

LITHO IN U.S.A.

The source of health care problems of the urban poor

The providers of health care, including physicians, are being blamed for the high costs of maintaining good health. This article points out and suggests that other factors create the problem and that providers cannot shoulder the entire blame.

By John H. Anthony, MBA
H. Pamela Goodman

The interrelationship between poverty and illness is very obvious. As Charles Mayo once said, "Sickness makes people poor . . . poverty makes them sick."[1] The poor suffer from almost every conceivable malady known to man, such as cardiovascular disorders, rheumatic fever, diabetes, cancer, visual disorders, mental disorders. The poor also have an extremely high infant mortality rate.

When considering the life-style of the poor, their health status appears to be a reflection of their socio-economic position.

It is essential when viewing this low status of health care that a number of indices be considered, namely low income, poor employment, poor education, housing and environmental conditions, overcrowding, and family life. If as Rene Dubos has written, "health is a never ending . . . adaptation to the total environment, it should be apparent that the roots of the health problems of the poor are more closely related to their shabby surroundings than to their own health practices."[2]

One of the most significant results of poverty is chronic illness. During the early 1930's, a study was conducted which showed a marked correlation between the two. Many years later, the National Health Survey ". . . revealed that the rate of chronic illness for persons on relief was about two and one-half times greater than the rate for persons with incomes of one-thousand dollars to fifteen hundred dollars."[3] Various other studies, especially those carried out by the Department of Health, Education and Welfare substantiate these earlier findings of a positive correlation between poverty and chronic disease. HEW also found that ". . . while the higher-income groups do suffer from chronic illness, their activity is not generally limited as a result of it. For the poor, . . . chronic illness limits activities more than three times as much as for the highest income group."[4]

In a Blue Cross Report on the *Health Care Problems of the Poor*, subjects were questioned as to how they viewed their health care. It was concluded that "living sick" is the dominant condition prevailing in our urban ghettos. Ironically, although the poor are less healthy than the rest of society, they actually attach a great deal of importance to health care.

As is the case in all strata of our society, the lack of good health stifles an individual's ability to "get ahead." One unemployed black put it this way: "When you have no learning, you don't know where to begin to learn. If you can't learn, then you can't learn nothing . . . But if you're feeling down and sick all the time, you can't get started to learn or earn."[5] The ghetto dweller, unlike approximately ¾ of the U.S. population, feels that his family's health has not substantially improved from that of previous generations. According to the Blue Cross Study, 51 percent of black ghetto dwellers feel that their health has deteriorated.[6]

Many blacks feel that poor diet has a detrimental effect on their health, physical and mental, and hence is a fundamental reason for their deteriorated state. Their main complaint is that the price of foods is outrageous, and they simply cannot afford to pay the prices. A study concerning the location of chain stores in the city of Detroit was conducted by Mary C. Sengstock. The report indicates that very few large chain-type supermarkets are located in ghetto areas. Instead, the neighborhoods are usually served by small, local neighborhood markets. Obviously, in a store such as this, prices must be higher, and the selection of goods not as wide. One house-wife explained the dilemma as such: "The only kind of food you can afford to buy makes it easy to gain weight . . . it's awful unhealthy foods . . . mainly fats and leftovers."[7] By not obtaining a properly balanced diet, it is almost impossible to expect an individual to maintain a satisfactory state of health.

At the time of conception, most fetuses have the same intellectual potential. However, after conception occurs, the fetus of an indigenous couple stands far less chance of maintaining this equality. Hence, he or she is less likely to reach a range of "normal" human intellectual potential. "Apart from the greater bio-medical risks a poor child will encounter before birth, he comes up against the cumulative ill effects poverty has had upon his female parent."[8] Fetal mortality, prematurity, and infant mortality are very apparent in the lower

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Mr. Anthony is chief, MSMS Bureau of Economic Information. Pamela Goodman is a junior studying urban affairs at The University of Michigan.

class of our society. Through various studies done on this subject, it becomes visible that these plights vary inversely with socio-economic status. Fetal mortality refers to deaths which occur during the reproductive cycle, resulting in either abortion or still birth. When making a statistical comparison of fetal deaths between the poor and the affluent, it is imperative that one takes into consideration that the affluent have far greater access to therapeutic abortions.

Infant mortality is ascribed to deaths that occur within the first year of infant life. Once again the non-white infant mortality rate is a prime example denoting the correlation between poverty and the problems of child birth. Prematurity might not appear as severe a consequence as infant mortality, yet it ". . . generally has a deleterious effect, and 50% of these infants have handicaps ranging from minimum neurological damage to severe mental deficiencies and blindness. Also premature infants have two or three times as many physical defects and 50% more illnesses than full-term babies."[9]

Results from studies done in New York and Washington, D.C. show that the rate of prematurity increases as socio-economic status decreases. Data also showed that a correlation exists between those who receive adequate prenatal care and those who do not. It was concluded that there is a direct relation between women that do not receive prenatal care and prematurity. "More than one-third of all mothers in U.S. cities over 100,000 population are now considered medically indigent. Among the eight million women or 12.1% of the nation's female population over the age of fourteen, who visited either obstetricians or gynecologists during 1963, the poor were grossly underrepresented. Only 3.5% of the women over fourteen from families with an annual income under four thousand dollars, made such visits. By contrast 17.1% of women over fourteen from families with annual income over seven thousand dollars were able to afford private care.[10] Once again, the poor are the ones who suffer.

According to Sarason and Gladwin, mental disorders and mental retardation are not always hereditary. Poverty, poor diet, inferior public education, environmental conditions, cultural deprivations, and other factors work together to create a causal relation between poverty and mental diseases. Primarily, because of their poverty, the poor endure a much higher degree of mental disorders than any other socio-economic group. An important factor, repeatedly brought out by numerous studies, is that a disproportionate number of the retarded come from culturally deprived populations, and that a high percentage of this group is retarded in function rather than lacking in endowment.

What Needs to Be Done

We need to further organize the public health programs that are intended for these segments of our society. We must develop a new means of informing this group of our society on the principles of health care. "It is doubtful that health education which simply presents the facts of disease or lists available medical facilities will be successful in reaching these segments of the public. The challenges and problems of everyday living are much more real to these people than the postponed rewards of preventative medicine, or the time-consuming search for the most desirable source of medical care."[11] It must be realized that the health care needs of the poor are different from those of other groups in our society, and the programs should be geared to their social structure.

It has been the case to try and work against disease without really doing anything about the existing poverty. By simply working around this dilemma, our problems are not going to be solved. We must begin to seriously act against poverty. The task of the physician must be the healing of the members of society. This task cannot be accomplished just by members of the medical profession. Society as a whole must work in unison to overcome the plight of the poor.

References

1. Rodger Hurley, *Poverty and Mental Retardation: A Causal Relationship,* New York: Random House, 1969, p. 140.
2. Robert Strauss, "Poverty as an Obstacle to Health Progress in Our Rural Areas," *American Journal of Public Health,* LV, 11, November, 1965.
3. Hurley, *op. cit.,* p. 141.
4. *Ibid.,* p. 141.
5. *Blue Cross Report on Health Care Problems of the Poor,* Spring, 1969, p. 22.
6. *Ibid,* p. 23.
7. Mary C. Sengstock, "Corporation in the Ghetto: Analysis of the Effects of Corporate Retail Grocery Sales on Ghetto Life," *Journal of Urban Law,* vol. 45, p. 687.
8. Hurley, *op. cit.,* p. 55.
9. *Ibid.,* p. 60.
10. *Ibid.,* p. 61.
11. *Ibid.,* p. 163

MSU Osteopathic College goal: to train quality family physicians

In this special article, the dean of the MSU College of Osteopathic Medicine describes the purposes and goals of his new school.

By Myron S. Magen, DO
Dean, Michigan State University
College of Osteopathic Medicine

If medical school deans hold one goal in common, it is to provide their students with the most comprehensive medical education possible, using the most sophisticated training methods their minds can assemble, while simultaneously serving the public in need of quality medical care.

The means to these ends have remained essentially the same in the United States, until the decade we are now entering brought a plethora of health care problems that refused to be solved by traditional methods.

While the medical profession has faithfully produced specialists of the highest calibre, the organization of their services, in combination with those of community family physicians, has not kept step. There are gaps and overlaps in medical care in this country that have produced severe shortages in primary health care delivery while, ironically, medical technology has gained an astounding level of sophistication.

Osteopathic college producing family doctors

The problem can partially be solved in medical schools with a re-ordering of priorities and with a restructuring of medical training programs. At the Michigan State University College of Osteopathic Medicine, we are addressing ourselves to producing quality family physicians who can and will work as valuable members of community health care teams. This goal includes a number of others—the improvement and shortening of the medical training program, the emphasis on early clinical experiences for the college's students, the provision of valuable continuing education experiences for physicians already in practice, and the use of advanced electronic communications systems to facilitate a decentralized approach to the curriculum.

Dean Magen

Through this rather innovative program, we at the College hope to begin serious reforms in the health care provided the citizens of Michigan. The health care team approach to medicine, if widely applied, can make better use of each physician's time and special skills; referral will become a fine science carefully conceived and wisely applied. Further, it has become obvious that no course of instruction should strive to train physicians for practice only in the next ten years—that the medical education we offer now must be colored by an ongoing flexibility that will enable us to train physicians in relation to the changing social scene and technological advances. Thus that element of our own program that seeks to provide continuing education for the practicing physician is one of its most valuable.

Clinical experiences in communities

The college's decentralized approach to medical education is further evidence of its determination to improve health care services in Michigan communities and, simultaneously, to provide its students with the kinds of experiences they will have in practice while they are still in training. In this program, students receive clinical experiences in communities away from the MSU campus, learning the sorts of medical resources communities have and the types of interactions that normally take place among medical professionals.

One of the most dynamic facets of this clinical program is the participation of practicing community physicians. Through the preceptor program, students are assigned to preceptors who act as their role models throughout the program. Each student visits his preceptor regularly, to practice his medical skills as he acquires them and to observe a physician in actual community practice. Other community physicians provide input in specialty review clinics and when the students begin making hospital rounds.

With the planned implementation of our clinical communications system, students receiving clinical training in remote communities will not need to constantly return to campus to attend laboratories and lectures, they will be able to receive this didactic material at the clinic through a two-way audio/visual hookup that will also allow them to ask questions of their campus-based instructors and receive immediate answers. This electronic system will have conference capabilities to enable faculty members at diverse locations to consult one another and allow clinical faculty to discuss patients and perform student evaluations.

The first step toward decentralization has been the maintenance of the college's Lakeside Clinic in Pontiac, where second and third year students receive clinical experiences while providing medical services to the disadvantaged citizens of that city. The college is considering clinic sites in other cities to expand this program and is concurrently making preparations for the implementation of the aforementioned clinical communications system.

The value of pursuing this sort of medical education program emerges as one considers the steadily increasing size of our entering classes on the one hand and the dearth of qualified medical faculty on the other. Within the decade, the ratio of students to faculty members would be too unbalanced to provide a superior education to each student, using existing teaching methods. The methods in predominant usage now require students and faculty to be in the same place at the same time for the transfer of knowledge to take place, and again for the evaluation of the knowledge received.

The implementation of an electronic communications system allows teaching faculty to remain on campus while their students receive other experiences in community hospitals and clinics. Clinical faculty will, in turn, be able to base their operations at the clinics and can use the system in the same way when the students are on campus. The system permits the optimum usage of each faculty hour and enables the college to plan for greatly increased enrollments within the next decade. It is possible, too, that this system can be utilized to present part of the college's continuing education program segment to practicing community physicians.

On campus, the college has established a programmatic relationship with the MSU College of Human Medicine and the College of Veterinary Medicine, plus the University's School of Nursing and School of Medical Technology. At present, activities of all these schools take place in shared facilities of particular campus buildings. Students from each of the three medical colleges also share some classes in the basic sciences. Osteopathic Medicine and Human Medicine are projecting joint programs and projects for the future. It has seemed only logical to administrators of both colleges to plan their futures together—to run joint programs when feasible and to derive maximum benefit from close campus proximity. Although the association between the two colleges is the first such in the country, the two are proving that the training programs run by each can be compatible and may even offer more benefits to students if occasionally they dovetail.

The College of Osteopathic Medicine at Michigan State University does not intend to sequester itself on the southeast corner of campus. The college's administrators plan a program of increased participation in the medical affairs of surrounding communities which has already begun. Hopefully, we can then alleviate some of the most pressing problems experienced by persons searching for adequate medical care.

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Just a few component societies have most MSMS members

Eighty-three percent of all MSMS members belong to just 13 of the component medical societies, according to figures released by the MSMS business office.

Wayne County Medical Society has the highest number of members with 2,987, followed by Oakland, 764; Kent, 501; Washtenaw, 496; Genesee, 353; Ingham, 341; Kalamazoo, 273; Macomb, 218; Saginaw, 188; Muskegon, 148; Calhoun, 147; Jackson, 122, and Berrien, 110.

Thirty-two of the component medical societies have less than 50 members each, while an additional 10 component societies have between 50 and 100 members each. Ontonagon County Medical Society has the smallest number of members, with five.

(The following figures, made available to MICHIGAN MEDICINE by the MSMS Bureau of Economic Information, reveal the percentage of physicians in each of Michigan's 83 counties.)

Michigan's Distribution of MD's and DO's
1971

County	% of Michigan's Population	% of State's MD's	% of State's DO's
Alcona	.08%	0	0
Alger	.10	.06%	0
Allegan	.75	.27	.19%
Alpena	.35	.31	.05
Antrim	.14	.03	.23
Arenac	.13	.04	.05
Baraga	.09	.06	0
Barry	.43	.20	.23
Bay	1.32	.96	1.32
Benzie	.10	.04	.09
Berrien	1.85	1.37	.99
Branch	.43	.43	.19
Calhoun	1.60	1.50	1.74
Cass	.49	.08	.23
Charlevoix	.19	.10	.09
Cheboygan	.19	.15	.05
Chippewa	.37	.21	.09
Clare	.19	.04	.28
Clinton	.55	.09	.23
Crawford	.07	.09	0
Delta	.40	.23	0
Dickinson	.27	.34	.05
Eaton	.78	.23	.38
Emmett	.21	.65	.09
Genesee	5.01	3.94	7.16
Gladwin	.15	.04	.23
Gogebic	.23	.13	.09
Grand Traverse	.44	1.05	1.08
Gratiot	.44	.33	.47
Hillsdale	.42	.17	.28
Houghton	.39	.25	0
Huron	.38	.21	.28
Ingham	2.94	3.81	3.63
Ionia	.52	.22	.66
Iosco	.28	.14	.05
Iron	.16	.08	.14
Isabella	.50	.35	.38
Jackson	1.61	1.26	.85
Kalamazoo	2.27	3.26	.61
Kalkaska	.06	.02	0
Kent	4.63	5.79	4.05
Keweenaw	.03	.01	0
Lake	.06	.09	.05
Lapeer	.59	.21	1.04
Leelanau	.12	.06	.09
Lenawee	.92	.64	.28
Livingston	.66	.25	.52
Luce	.08	.11	0
Mackinac	.11	.06	.14
Macomb	7.05	3.24	8.76
Manistee	.23	.18	.28
Marquette	.73	.72	0
Mason	.25	.24	.05
Mecosta	.31	.15	.28
Menominee	.28	.12	.05
Midland	.72	.74	.14
Missaukee	.08	.03	.05
Monroe	1.33	.54	.75
Montcalm	.45	.20	1.37
Montmorency	.06	0	.05
Muskegon	1.77	1.41	2.50
Newaygo	.32	.13	.09
Oakland	10.23	15.50	18.83
Oceana	.20	.08	.09
Ogemaw	.13	.04	.09
Ontonagon	.12	.06	0
Osceola	.17	.06	.14
Oscoda	.05	.07	.05
Otsego	.12	.09	0
Ottawa	1.44	1.01	.61
Presque Isle	.14	.03	.09
Roscommon	.11	.09	.19
Saginaw	2.48	2.04	2.83
St. Clair	1.35	1.00	.66
St. Joseph	.53	.37	.33
Sanilac	.39	.20	.38
Schoolcraft	.09	.06	0
Shiawassee	.71	.34	.38
Tuscola	.55	.20	.52
Van Buren	.63	.35	.05
Washtenaw	2.64	10.78	1.04
Wayne	30.04	29.84	30.51
Wexford	.22	.22	.19
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> *—George Sarton, from "The History of Medicine Versus the History of Art"*

Would it be useful in clinical practice to have government predetermine drugs of choice?

Opinion

Results of a survey of physicians:

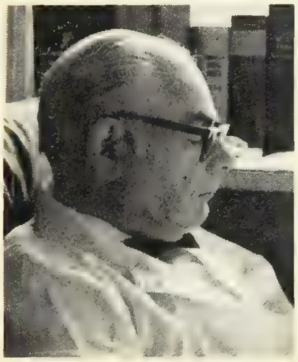
13.3%
Yes, it would be useful.

86.7%
No, it would not be useful.

Would it be useful in clinical practice to have government predetermine drugs of choice?

Doctor of Medicine

Walter Modell, M.D.,
Professor of Pharmacology,
Cornell University
Medical College,
Editor,
Clinical Pharmacology
& Therapeutics,
Drugs of Choice,
Rational Drug Therapy



The proposition that government should determine one or two "drugs of choice" within a given therapeutic class reflects the belief that a similarity in molecular structure insures a close similarity in pharmacologic effect. But this is by no means the rule. An obvious example would be in the field of diuretics, where a small change in chemical structure accounts for substantial differences in concomitant effects such as potassium excretion.

Any attempt to dictate the "drug of choice" would be complicated by the fact that some populations demonstrate a bimodal distribution in their reaction to drugs. If the data on drug response are mixed for the total population, one drug will appear to be as useful as the other. But if drug response is reported separately for different segments of the population, drug A will be found to be better for one group and drug B for the other.

It may, of course, be possible to determine drugs of choice in particular categories on a broad statistical basis. But there are always certain patients in whom a drug produces odd, unpredictable or idiosyncratic reactions. So, though a drug might statistically be the most useful one in a given situation, individual variations in response might make it the *incorrect* one.

The point I wish to make is that if two, three, four or more drugs in one class are of approximately equal merit, that in itself is justification for their availability. Exceptional cases do arise in which one drug would be useful to a certain segment of the population and another drug would be of no use at all. In the practice of medicine, the physician must be prepared to treat the routine as well as the unusual case.

Another objection to the determination of a drug of choice is that precise statements of *relative* efficacy are very difficult to make—much more difficult than statements of efficacy. For example, in testing drug efficacy, it is easy to determine the difference between a drug that is effective in treating a condition and one that is not at all effective. Thus, it is fairly easy to determine whether a drug is more effective than a placebo. But if you compare one drug that is effective with another drug that is also effective, and the relative differences between them are very slight, statements of relative efficacy may be very difficult to make with assurance.

I do not mean to imply that relative efficacy statements are not useful or can never be made. With some groups of drugs (e.g., analgesics), extensive study and precise methodology have yielded useful information on relative efficacy. But in most situations, such information can be acquired only through studies encompassing three to five years of use in many more patients than are used to compare drugs with a placebo for the introduction of a drug into commerce. It is really only after practitioners use a drug extensively that relative safety and efficacy in practice can really b determined.

The Bureau of Drugs ha suggested the package insert as a possible means o communicating informatio on relative efficacy of drug to the physician. I find thi objectionable, since I d not believe the physicia should have to rely on thi source for final scientifi truth. There is also a practical objection: Since fe physicians actually dispense drugs, they seldom see the package insert. I any event, I would maintain that the physician should know what drug h wants and why without depending on the government or the manufacturer to tel him.

Undoubtedly, physician are swamped by excessiv numbers of drugs in som therapeutic categories. An I am well aware that man drugs within such categories could be eliminate without any loss, or perhaps even some profit, t the practice of medicine But, in my opinion, neithe the FDA nor any othe single group has the expertise and the wisdom necessary to determine the on "drug of choice" in al areas of medical practice.

Maker of Medicine

nneth G. Kohlstaedt, M.D.,
Vice President,
Medical Research,
Eli Lilly and Company

In my opinion, it is not e function of any govern- ent or private regulatory ency to designate a "drug choice." This determina- n should be made by the ysician after he has re- ived full information on e properties of a drug, d then it will be based on s experience with this ug and his knowledge of e individual patient who seeking treatment.

If an evaluation of com- rative efficacy were to be ade, particularly by gov- nment, at the time a new ug is being approved for arketing, it would be a eat disservice to medi- ne and thus to the patient he consumer. For exam- e, when a new therapeu- agent is introduced, on e basis of limited knowl- ge, it may be considered be more potent, more fective, or safer than oducts already on the arket. Conceivably, at is time the new drug uld be labeled "the drug choice." But as addi- nal clinical experience is cumulated, new evidence ay become available. ter, it may be apparent that the established products should not be so easily dismissed.

Variation in patient response to drugs constitutes one of the major obstacles to the determination of "drugs of choice." We are just beginning to open the door on pharmacogenetics, but it is evident that genetic differences cause wide variations in the way drugs are absorbed, metabolized, etc. This fact alone is sufficient to make unrealistic the idea that there is one drug in each class to be used for every human being.

The problem of determining relative drug efficacy is an extremely complicated one. Comparison with other drugs of the same class should not be a prerequisite for marketing a new substance. In some therapeutic areas, it may be difficult to make accurate comparisons. For example, in the treatment of infections it is not possible to conduct crossover studies. Recovery may be influenced by factors which cannot be controlled or measured, i.e., natural host resistance and virulence of infective agents. A drug's acceptability must often be judged on the basis of its own performance, and this may be limited to experience in a relatively small patient population. If the introduction of a new drug must await the adequate establishment of relative efficacy, the duration of clinical trial and extent of studies would be greatly prolonged, particularly for rare or unusual conditions. The availability of a new drug would be delayed. Many patients might suffer needlessly and lives might be lost.

Relative efficacy can best be established by experience in a general patient population through regular channels of clinical practice. The physician considers the patient as a whole, which means the patient often has multiple problems and drugs must be selected with this in mind. Hence, a "drug of choice" in an uncomplicated case may not be the best drug for a patient with associated problems. Publication of well-controlled studies in medical journals may provide comparative evidence; discussions at medical meetings, presentations at postgraduate courses, and the new audiovisual technology may bring evidence to physicians on comparative therapy. In a free medical marketplace, a drug that does not measure up will fall into disuse. For example, broad clinical experience has established vitamin B_{12} as the "drug of choice" for the treatment of primary pernicious anemia. No amount of advertising or promotional effort by the manufacturer could increase the use of liver extract for this anemia. However, a physician may wish to employ parenteral liver preparations for a special purpose.

In the field of surgery, peer review in the hospital has brought significant improvement in the use of new techniques and procedures. Something of this nature would be useful in the area of drug therapy. However, it should be developed by the medical profession itself and would necessitate, for its proper function, an improvement in the dissemination of reliable data on clinical pharmacology of drugs under consideration.

Ideally, information on the relative efficacy of drugs should be gathered and assessed by the physicians who actually administer the specific agents to a specific patient population. To do this, they will need even more information on the drugs they use – information that the pharmaceutical manufacturers must begin to provide if government regulation of *"drugs of choice"* is to be avoided.

Opinion & Dialogue

What is your opinion, doctor?
Send us your comments on the above issue.

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MSMS campaign against smoking gathers momentum

Michigan physicians are being urged to exert new leadership to discourage smoking, in a special project of the Michigan State Medical Society Committee on Public Relations, chaired by Thomas R. Berglund, MD, of Portage.

The project is based on the following MSMS official position, adopted by the Council last March 19 on the recommendation of the Committee on Cardiac Disease and the Committee on Public Relations:

1. That MSMS encourage its members to reflect their knowledge of the hazards of smoking by personally stopping smoking;
2. That MSMS encourage its members to encourage their individual employes and hospital staff members to stop smoking;
3. That MSMS encourage its members to work to ban the sale of tobacco products in all hospitals and health facilities;
4. And that, MSMS, through the Committee on Public Relations, urge MSMS members to avail themselves of all opportunities to lead or participate in the dissemination of information regarding the hazards of smoking, cooperating with existing health agencies of like goals.

Young people, among whom tobacco sales are increasing, will be the particular target of a public information program in July, August and September.

For physicians, *Michigan Medicine* offers this special pull-out card, suitable for framing, for display in reception rooms. Additional copies of the card are available from the Communications Department, Michigan State Medical Society, PO Box 950, East Lansing, Mich. 48823.

The soft-sell message, "Thank you for not smoking," was suggested by Robert B. Burrell, MD, of Kalamazoo, a member of the public relations committee. He reports that his paitents respond well to the suggestion.

This sign will stand alone on reception room desk, if folded across center of page. Or, the lower half of page may be mounted in standard 5″ x 7″ frame. Turn page and you will find larger version to fit standard 8″ by 11″ frame.

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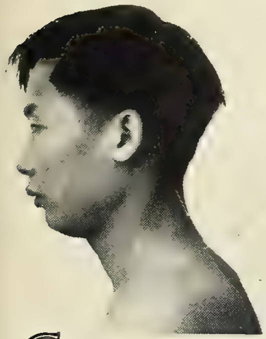

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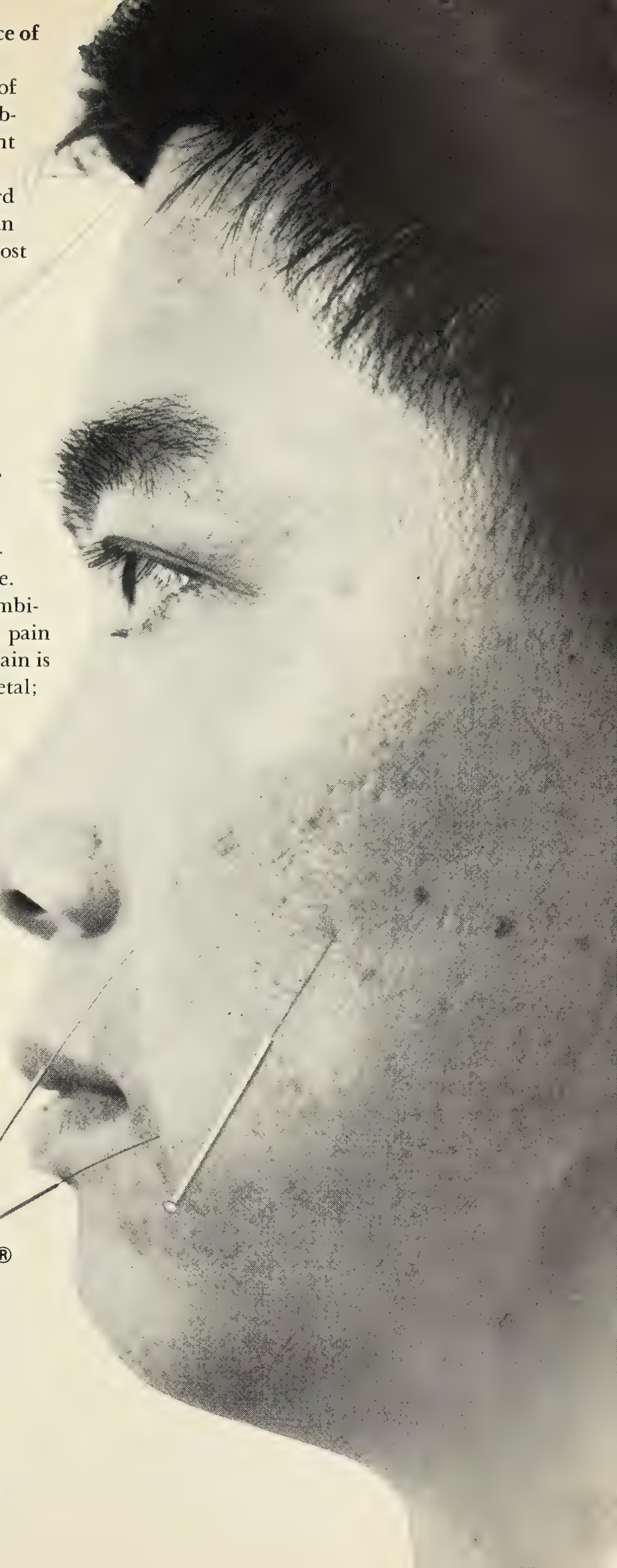

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County in the spotlight

Marijuana - malpractice - amphetamines; lively topics at Macomb County meetings

By Judith Marr
Managing Editor

How do you attract local physicians to your county medical society meetings? How do you keep them interested and participating after they get to the meetings?

Perhaps the Macomb County Medical Society and its president, Donald G. Blain, MD, Mt. Clemens, have the answer.

Since January, there has been a "Proposal of the Month," published in the bulletin before each meeting, and then discussed and voted upon at the meeting by all the members attending.

"The proposals have been the source of a lot of interesting discussion," he reports. "They've livened up our meetings. They give people a chance to take part instead of just listening."

The proposals for each month, beginning in February, have been:

February—"Be it resolved that osteopathic physicians attend meetings of the Macomb County Medical Society."

March—"Resolved, that amphetamines will not be prescribed in the treatment of obesity."

April—"Resolved, that members of the Macomb County Medical Society take a stand against smoking."

May—"Resolved, that the use of marijuana not be legalized."

June—"Resolved, that a no-fault, workmen's compensation-type malpractice system be developed."

All the resolutions have passed, reports Nelda Gasperson, executive secretary for the Macomb society, and then been submitted to the media.

This expression of his members' ideas is just what Doctor Blain had in mind when he initiated these proposals.

"I think one of medicine's chief shortcomings is that it doesn't express itself," he explains. "For years we've not made our wants known to the legislators and the public.

"As a result we say our public relations are bad, and that people don't understand us. In reality, we haven't collectively decided what we stand for. It seemed to be simple to ask physicians what they want and how they feel."

The proposals are solicited from the county society members and often come out of executive committee meetings.

"I think we can be an effective force if we just say what we want," he says. "Grass roots physicians complain about no one coming to them to ask what they want. I think the time has come to open up the meetings and let the members say what they want. At least it wakes everyone up."

It is a little early to assess the results of his efforts to generate more interest in Macomb County Medical Society meetings.

However, since his members approved meeting with local osteopaths, the officers and past president of the Macomb County osteopaths were invited to and attended a MCMS meeting. The Macomb society continues to send them information on its scientific and political meetings, which are of interest to both MDs and DOs.

And following discussion on the smoking resolution, letters were sent to St. Joseph Hospital in Mt. Clemens asking it to remove cigarette machines from its premises and otherwise to discourage smoking by physicians, patients and hospital personnel.

"At least our stands are known to everybody," says Doctor Blain.

Following are suggestions to other county societies who would like to spur meeting interest with a "Proposal of the Month":

(1) Be sure there is a resolution for voting each month.

(2) Ensure that the proposals are of current interest and germane to the practice of medicine.

(3) Be sure the resolutions represent what is good for the health of the community—"I believe that is what the county medical society ought to stand for," says Doctor Blain.

County scenes

Delta doctors still urging Escanaba location of facility

Delta County physicians are continuing their efforts to persuade the Board of Commissioners to locate a proposed multi-agency county building adjacent to a core of already-established medical buildings in Escanaba.

The doctors' major activity now, according to William A. LeMire, III, MD, Escanaba, who has been active in the cause, is to raise funds to finance the building, which will house the district health department, adult mental health clinic and the county social services department.

The county finally has told the doctors if they can raise the funds the county will locate the building where the doctors want it, although the county board favors another site.

"The doctors have felt for a long time that the health department and any medically-related buildings should be where the rest of the doctors are, and that the doctors should have the availability of the health department and its clinics in their day-to-day practice," says Raymond Hockstad, MD, MSMS Councilor also active in the drive.

"We feel we should have a diagnostic core where the doctors are."

The Delta County Medical Society has taken no official position on the location of the multi-agency building.

Doctor Hockstad points out the Delta County physicians have worked a long time to develop a community plan to coordinate the local health care delivery system.

Interested physicians, commissioners, city officials, hospital administrators and community leaders met recently with out-of-town medical leaders who joined with the Delta doctors in urging that the new facility be located near Doctors' Park.

The out-of-towners were John L. Isbister, MD, chief, Bureau of Community Health, MDPH; Kenneth Rome, MD, director, Western Upper Peninsula Health Department; William Coughlan, secretary, AMA Committee on Community Health Care, and Richard Campau, manager, MSMS Department of Economics and Operations.

The Delta County doctors plan future meetings with state health planning officials to try to secure state and federal funds.

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Genesee first of county societies honoring team doctors

Fourteen Genesee County physicians have been honored for their service as area high school team physicians in a campaign sparked by MSMS to recognize high school team physicians around the state.

The Genesee doctors are Donald Allcorn, MD; Joseph Batdorf, MD; Jack Benkert, MD; Virgilio Bonet, MD; John Damm, MD; Bernard Harris, MD; Richard Lundeen, MD; S. Harry Nassar, MD; Charles Thompson, MD; Peter S. Thoms, MD; James D. Walker, MD; Daniel Walter, MD; Frank White, MD, and Melvyn D. Wolf, MD.

During May, mailings were made from MSMS headquarters to all component medical societies announcing that awards are available to any county societies wishing to present them. Kent County Medical Society plans a presentation in the fall, and the Kalamazoo Academy of Medicine and Ingham County Medical Society have made inquiries about the certificates.

Further information may be obtained from the MSMS Department of Communications and Professional Information.

St. Clair physicians help send PH band to Munich Olympics

St. Clair County Medical Society, with 82 members, has contributed $1,000 to the Port Huron High School Big Reds Marching Band, to enable it to make a trip to Munich in August for the Olympic Tour and Marching Competition.

A total of $130,000 was needed to finance the two-week trip for the 200 young musicians. The band is one of 10 in the U.S. to be invited to take part in the competition.

The St. Clair physicians are among many local civic groups contributing to the band's funds.

Expectant parents classes sponsored regularly by Marquette doctors

Three times a year, the Marquette-Alger County Medical Society sponsors a series of expectant parents classes at local hospitals. The medical society presents the classes in conjunction with the Marquette County Health Department, Bell Memorial Hopital and St. Luke's Hospital in Marquette. The series consists of seven classes held once a week at each hospital.

Wexford doctors donate $1,000 for mental health center

The 20-member Wexford County Medical Society has made a donation of $1,000 to the new North Central Michigan Mental Health Centers, Inc., based in Cadillac and designed to provide the full range of mental health and mental retardation services in the area, except for in-patient care.

The Wexford donation will be applied to the continuing expenses of the center, which is the first full-time mental health facility in the Wexford-Crawford-Missaukee counties area. The center was funded in November and became fully-staffed on May 15.

The decision to donate the funds, which nearly depleted the county medical society's treasury, according to Kenneth Kleyn, MD, Cadillac, president, was made after a mental health board member attended a WCMS meeting and described the goal of the new center and its need for funds.

How does patient get doctor? Kent physicians seeking answer

The Kent County Medical Society is still wrestling with the problem of finding physicians for new patients, though most of the Grand Rapids-area physicians answering a recent KCMS poll said they would accept new patients.

According to William McClimans, KCMS executive secretary, 75 per cent of the county society members answered the poll, but most are specialists. And his 30 to 40 calls per day for new doctors are mainly for primary physicians, he explains.

Early this spring, the KCMS held a special meeting of physicians at the Pantlind Hotel, Grand Rapids, to try to find solutions to the problem.

Ottawa doctors host clergymen

Sixty physicians and 35 clergymen attended an Ottawa County Medical Society-sponsored meeting recently which featured a panel discussion of the role of the physician and the clergyman in catastrohic illness.

"The meeting was very well received," reports Peter J. VerKaik, MD, Hudsonville, OCMS president. "We concluded that ministers and physicians should work in closer relation and that in the past there has been considerable misunderstanding about the roles of both in the care of the patient."

The meeting was the first of its type for the OCMS and was organized by the Committee on Medicine and Religion, chaired by Bernadine Devalois, MD, Holland. Moderator was Henry W. Ten Pas, MD, Holland, and panel members were Vernon L. Boersma, MD, Holland, and Frank L. Groat, MD, Grand Haven.

Here is explanation of Emergency Health Personnel Act

Because component societies will be requested to approve community applications for additional health personnel through the National Health Service Corps, Michigan Medicine *presents this article describing the purposes of the corps and its possible impact on medical practices.*

By Herbert Mehler
Chief, Research and Analysis
Government Medical Care Programs

The Emergency Health Personnel Act of 1970 (P.L. 91-623) established the National Health Service Corps authorizing the Secretary of Health, Education and Welfare to assign commissioned officers and other public health service personnel to provide health care and services for persons residing in areas designated to have critical health manpower shortages.

Assignments are initiated by application from a state or local health agency or other public or non-profit public health organization that health personnel are needed. Certification by the component and state medical societies and the local government are required by law.

Care and services will be provided in connection with 1) direct health care programs carried out by the service; 2) any direct health care program carried out in whole or in part with federal financial assistance; or, 3) any other health care activity which is in furtherance of the purposes of the act.

Persons receiving health care services will be charged at a rate established by regulations to recover the reasonable cost of providing these services. For persons unable to pay such charges, the furnishing of services at a reduced rate or at no charge is provided. If a federal, state, or local agency or other third party should be responsible for all or part of the service, if it were provided under this provision, the secretary will collect from the agency or third party a portion of the costs for which it would be responsible.

MSMS recently requested component medical societies to review a set of Interim Guidelines and Procedures formulated by the MSMS Committee on Governmental Medical Care Programs. In April, 1972, The MSMS Council approved the following guidelines:

1. Applications shall not be considered until the receipt of a written decision by the component society.
2. The component society will be contacted to ascertain the authenticity and accuracy of the application.
3. The component society will be requested to suggest MSMS action.
4. When necessary and advisable MSMS may intervene as a mediator in local disagreements.
5. Determinations will be consistent with decisions of component societies.
6. The appropriate Councilor(s) will be provided background information and the actions taken by the component and state medical society.

As of May 31, applications from four counties received endorsement of the component society and MSMS. Kalamazoo and Hale (Iosco County) were recently included by HEW among 122 US urban and rural areas as medical poverty pockets qualifying for physicians assigned by the National Health Service Corps.

MSMS deems it of paramount importance that component societies exercise primary involvement to thoroughly study and review all applications submitted for endorsement. This is important for determining the program's effect and impact on local medical practices. Continued liaison, communication and monitoring also are necessary.

Component societies are invited to direct any questions about this program to MSMS. Advice and assistance is available from MSMS staff.

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Ottawa County MDs care for migrants at Holland clinic

(Note: This article was written by Deanna Popoff, free-lance writer from Lansing.)

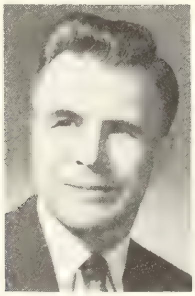
One of the most extensive health care programs for migrants in Michigan is operated each summer in Ottawa County.

The Holland Migrant Health Clinic is operated Wednesday evenings in the Friendship Center, north of the city. Three pediatricians and general practitioners rotate in schedule for the summer clinics.

The Ottawa Public Health Department reports that in the summer of 1971, as many as 40-65 patients came to the clinic in one evening. Approximately 4,000 migrants came to Holland for the 1971 harvest.

The Ottawa County Public Health Department wrote one of the first migrant project applications for federal funds. Holland set up the first migrant health service clinic in 1962 under the inspired leadership of Miss Kathryn Groenevelt, director of nurses of the health department.

The history of medical service to migrants in Holland is of interest. Vernon Boersma, MD, the founder of migrant health service in Holland used a trailer to visit the migrant camps to give immunizations in 1959, then changed to a centralized location. Doctor Boersma volunteered his time for no pay until the first Migrant Health Clinic was set up in 1962. In the early days of medical service to the migrants, he worked closely with the United Church Women, the Ottawa County Public Health Department, administering medical services to the migrants.



Doctor Boersma

Miss Groenevelt

Doctor Boersma, a pediatrician, became the chief project physician when the Migrant Health Clinic was established, and he was responsible for enlisting the services of other interested physicians to work in the clinic. Miss Groenevelt was the organizer and director, and one of her assistants, Mrs. Fran Hamlin has been especially instrumental in making the program work between clinics as well as at clinic time.

Doctor Boersma reports that he appreciates the government's efforts to fund health clinics, facilitate getting doctors and a staff on a regular basis.

He commented, "I think that people seldom get a good understanding of the problems of the migrants. The migrants have an antagonism toward welfare."

Paul E. Dykema, MD, a member of the pediatrician team, reports that the doctors see migrant children and adults. Doctor Dykema reports, "If a case needs special attention, the pediatrician refers the patient to certain physicians for further care." The clinic doctors and nurses screen emergency cases and use the doctors' offices for referral between clinics.

James K. Chamness, MD, pediatrician, says he "derives some satisfaction working in the migrant health clinic as a break from the usual routine."

Doctor Chamness says he is sometimes discouraged due to a lack of follow-up. The clinics are aided by a team of nurses, local Spanish interpreters, and migrant interpreters. Referral service is part of the job of the Ottawa County Health Department that sends health information to the migrant's home base public health department.

The Migrant Health Projects of Michigan support the volunteer doctors by facilitating information flow on the patients, screening the patients, and checking the follow-ups.

Doctor Boersma reports that the medical services to the migrant are good. The health needs of the migrant are taken care of, and this includes dental care.

The migrant health clinic projects in the north, south central, and southwest regions of Michigan hold clinics in the summer. Each area varies the clinic operation, size, and staff to help the physicians use time wisely and efficiently. For the next year, HEW plans a reorganization of the migrant health project areas of Michigan.

The services provided by the Michigan sponsors of migrant health projects financed by the United States Public Health Services include medical and dental services, immunization, nursing services, screening and testing. Housing or camp inspections, education for family planning, and outreach is also available to the migrant who comes to Michigan.

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A suggestion that MSMS carry out a chiropractic education project was made by Richard D. Coak, MD, left, of Tecumseh. At left is Seymour Krevsky, MD, Detroit, of the PR committee. Abraham Brickner, center, executive, Michigan Heart Association, urged cancer education efforts.

Thomas C. Payne, MD, Lansing, was chairman for the "PR hearing" conducted by the MSMS Committee on Public Relations when MSMS chairmen, specialty society presidents, component society leaders and representatives of health agencies suggested ideas for 1973.

Thomas R. Berglund, MD, right, chairman of the MSMS Committee on Public Relations, discusses details of a MSMS stop-smoking project with Robert B. Burrell, MD, PR committeeman from Kalamazoo.

Public service ideas suggested at hearing held by PR Committee

The projects of the Woman's Auxiliary to MSMS were explained by Mrs. Charles Schoff, state president. Listening at left is J. Leonidas Leach, MD, Flint, of the PR Committee.

Coller-Penberthy-Thirlby Conference applies toward Physician Recognition Award

Michigan physicians who attend the 52nd annual Coller-Penberthy-Thirlby Medical Conference July 27-28 in Traverse City may apply their attendance there toward credit for the AMA's Physician Recognition Award.

The conference will apply also toward credit hours with the American Academy of General Practice, according to Laurence P. Skendzel, MD, Traverse City, chairman.

The meeting will be at the Park Place Motor Inn in Traverse City. An estimated 350 physicians are expected to attend.

MAFP about to stage 26th Annual PG Clinic July 15-19 at Harbor Springs

The twenty-sixth annual postgraduate clinic of the Michigan Academy of Family Physicians is scheduled July 15-19 at Boyne Highlands in Harbor Springs. The meeting is divided between the Congress of Delegates July 15-16 and the Scientific Sessions July 17-19.

Guest speakers for the scientific assembly include Celso-Ramon Garcia, MD, Philadelphia, director, Division of Human Reproduction, Department of OB-GYN, School of Medicine of the University of Pennsylvania; Ray W. Gifford, MD, Cleveland, head, Department of Hypertension and Nephrology, Cleveland Clinic Foundation; W. Fred Mangan, Battle Creek, vice-president, Black and Skaggs Associates, Inc., and secretary-treasurer, Professional Management Inc., and Roberto F. Gluckman, MD, associate physician, Division of Gastroenterology, Henry Ford Hospital.

WSU alumni honor Doctor Evans

A special Distinguished Faculty Award was presented to T. N. Evans, MD, Detroit, at the recent 104th annual Clinic Day and Reunion of the Wayne State University School of Medicine. Doctor Evans was honored for his nearly two years as acting dean of the WSU School of Medicine.

Distinguished Service Awards were presented at the reunion to Robert U. Massey, MD, Dean of the University of Connecticut School of Medicine, and Anthony Kales, MD, professor and chairman, Department of Psychiatry, College of Medicine, Hershey Medical Center of Pennsylvania State University. Doctor Massey was graduated from WSU in 1946 and Doctor Kales in 1959.

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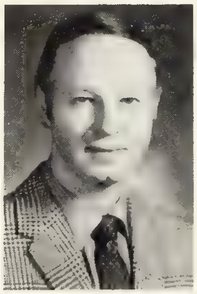
Doctor Beekhuis

G. Jan Beekhuis, MD, Detroit,
is new president-elect of the American Academy of Facial Plastic and Reconstructive Surgery, Inc. He will take office in 1972. Doctor Beekhuis is professor and chairman of otolaryngology at Wayne State University and devotes his private practice to head and neck cancer surgery and reconstruction and head and neck plastic surgery.

Cecil D. Conrad, MD, Royal Oak,
has been honored on his retirement with the establishment of a $10,000 scholarship in his name at Wayne State University. The scholarship fund represents the donations of more than 450 friends and associates of Doctor Conrad, who has practiced obstetrics and gynecology in Royal Oak since 1948.

Joseph C. Denniston, MD, Caro,
is new deputy director of the Michigan Department of Mental Health. His appointment by MDMH Director E. Gordon Yudashkin, MD, was effective June 1. Doctor Denniston is responsible for development of comprehensive services for mentally retarded and mentally ill in the metropolitan region. He has served as medical superintendent of the Caro State Home and Training School for the past two years.

Allen J. Enelow, MD, East Lansing,
is new chairman of the Department of Psychiatry at Pacific Medical Center in San Francisco, effective Aug. 1. Doctor Enelow is presently chairman of the Psychiatry Department at Michigan State University's College of Human Medicine. He has held the MSU position since December, 1967, when he founded the department and became its first chairman.

Joseph V. Fisher, MD, Chelsea,
president of the Michigan Academy of Family Physicians, will join the faculty of the Medical University of South Carolina, Charleston, on July 1. He will be associate professor in the department of family practice, which was established there in 1970.

Ernest Gardner, MD,
has returned to the WSU School of Medicine after a year's sabbatical. He taught anatomy, neurology and orthopedic surgery at the University of California at Davis, and also taught anatomy at Stanford. He was a special research fellow of the National Institute of Neurological Diseases and Stroke and traveled in Europe presenting scientific papers and visiting medical schools.

Doctor Gardner has resumed his duties at WSU as professor of anatomy, doing research and teaching.

John P. Harm, MD, Detroit,
is new director of the nursery and neonatal intensive care unit at William Beaumont Hospital, Royal Oak. He formerly served as director of nurseries for the Wayne State University School of Medicine.

Doctor Jend

William Jend, Jr., MD, Detroit,
is new president of the Industrial Medical Association. Medical director of the Michigan Bell Telephone Co., Doctor Jend was installed at the association's annual meeting in Chicago in mid-April. He is a former chairman of the MSMS Occupational Health Committee. Named to the IMA board of directors is Francis L. Purcell, MD, Ypsilanti; while Duane L. Block, MD, Flint, former IMA president, received the association's 1972 meritorious service award.

Edward J. Kollar, MD, East Lansing,
new professor of psychiatry at Michigan State University, has been assigned to Flint to serve as director of undergraduate medical education for Hurley, McLaren and St. Joseph's hospitals there. He will be coordinating the operations of a corporation formed between MSU and the three hospitals to train MSU medical students in Flint. Doctor Kollar has been in private practice in Tucson, Ariz., the past four years.

Warren J. Liedel, MD, Monroe,
has been selected as the first chief of staff of the new Mercy-Memorial Hospital, following the merger of the two Monroe hospitals. S. N. Kelso, MD, has been added to the new hospital's board

(Continued on page 664)

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of directors as representative of the Monroe County Medical Society.

William Martel, MD, Ann Arbor,
is one of five new national medical consultants in radiology to the U.S. Air Force. Doctor Martel is director of diagnostic radiology at the University of Michigan Medical Center.

James V. Neel, MD, PhD; and Donald L. Rucknagel, MD, PhD, Ann Arbor,
are among three University of Michigan scientists to receive the first Martin Luther King Jr. Medical Achievement Awards granted by the Southern Christian Leadership Conference (SCLC) May 31 in Philadelphia. They are honored for their contributions to sickle cell anemia research. The occasion was the first "Race for Life" Sickle Cell Anemia Awards Banquet, sponsored by the Philadelphia chapter of SCLC with proceeds to open a National Sickle Cell Anemia Center in Philadelphia.

Donald C. Overy, MD, Birmingham,
is new president of the Michigan Heart Association following his election late in May. Raymond E. Fuller, MD, Grand Rapids, was selected president-elect by the association. Doctor Overy is chairman of the Coronary Care Unit of St. Joseph Mercy Hospital in Pontiac, is president of the Detroit Heart Club and a member of the board of governors of the University of Michigan Medical Center Alumni Society.

H. Marvin Pollard, MD, Ann Arbor,
is one of 13 fellows of the American College of Physicians to be awarded the ACP's prestigious "mastership." Doctor Pollard, a past president of the ACP, is recognized for his extensive work in gastroenterology, diagnostic acumen and thoughtful attention to patients. Pollard is head of the gastroenterology section at the U-M Medical Center, is immediate past president of the American Cancer Society and has been president of the American Gastroenterology Society, the World Organization and the World Congress of Gastroenterology.

W. B. Prothro, MD, Grand Rapids,
is a new member of the State Advisory Council on Alcoholism. Director of the Grand Rapids-Kent County Health Department, Doctor Prothro was appointed to the state council by Gov. William G. Milliken. Doctor Prothro was one of the first public health administrators to promote and encourage the development of alcoholism treatment facilities as a city-county service.

Charles A. Schoff, MD, Midland,
is new associate director of medical education for Midland Hospital and carries primary responsibility for the supervision of the Family Practice Center at Midland Hospital. He serves under Robert E. Bowsher, MD, Director of Medical Education at the hospital.

Doctor Rhoades

Francis P. Rhoades, MD, Detroit,
is new president of the American Geriatrics Society. Doctor Rhoades was installed at the 29th annual meeting of the society April 6 in New York City.

Neal A. Vanselow, MD, Ann Arbor,
is new chairman of the expanded University of Michigan Department of Postgraduate Medicine and Health Professions Education. Doctor Vanselow succeeds Harry A. Towsley, MD, and has served as acting chairman since Doctor Towsley's retirement last year. Doctor Vanselow is an internist and allergist and is president-elect of the Washtenaw County Medical Society.

Robert Vitu, MD, Saginaw,
will be installed as the new president of the Michigan Academy July 19 at the GP course at Boyne Highlands.

Arnold M. Weissler, MD, Detroit,
is among 19 cardiovascular scientists from around the United States to be elected to three-year terms as governors of the American College of Cardiology.

George Wilson, MD, PhD, Detroit,
is newly named as a consultant on drup abuse and laboratory programs to the Michigan Department of Mental Health. Doctor Wilson has served as associate director of the State Mental Health Drug Abuse Center in Detroit during the past two years. His new appointment was effective May 22.

Robert F. Wilson, MD, Detroit,
is new assistant dean of Wayne State University School of Medicine, in charge of Detroit General Hospital affairs. His appointment by Robert D. Coye, MD, dean, WSU medical school, was effective June 1. Doctor Wilson is professor of surgery at WSU.

Joseph J. Woods, MD, Detroit,
is new president of the Michigan Society of Obstetricians and Gynecologists. Serving with him are George W. Morley, MD, Ann Arbor, president-elect; Robert G. Walkowiak, MD, Detroit, secretary; and John M. Malone, MD, Farmington, treasurer.

Legislative Day scenes

When Rep. William Weber (R-Kalamazoo) attended the 1971 Legislative Day of the MSMS Woman's Auxiliary, he left his pipe. So, at this year's recent event, he wore a new pipe on a yarn rope around his neck, not to forget it. But the Kalamazoo members of the auxiliary, represented by their county president, Mrs. Charles Overbey, left, and Mrs. F. L. Clement, surprised Rep. Weber with the presentation of his old pipe, wrapped in bright tissue paper with a packet of tobacco enclosed.

A special guest at the annual Legislative Day meeting of the Woman's Auxiliary, scheduled again at the Olds Plaza Hotel, Lansing, was Mrs. Lee R. Rice of Boulder, Colo., left, a national director of the Woman's Auxiliary to the AMA. She was welcomed by John J. Coury, MD, Port Huron, MSMS president, and Mrs. Charles Schoff of Midland, president of the Michigan auxiliary. Doctor Coury addressed the women about the changes ahead for medical practice.

Mrs. Robert Westerhoff of Grand Rapids, right, was chairman of the 1972 Legislative Day, when members of the Woman's Auxiliary to MSMS met with their legislators over luncheon. As legislators arrived from the Capitol Building across the street, Mrs. Westerhoff greeted them with, from left, Mrs. James C. Breneman of Galesburg and Doctor Breneman, who was then MSMS Doctor of the Week with the legislature, and Warren F. Tryloff, MSMS director.

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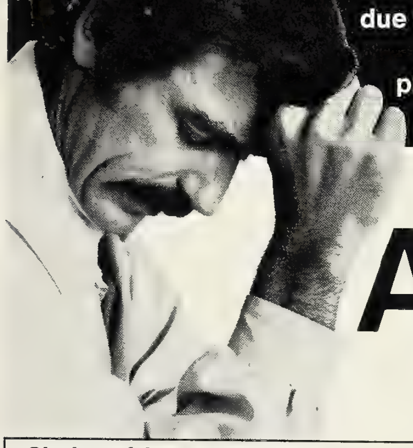

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Fertility and Sterility, January 1970
Official Journal of the
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Adverse Reactions: Since Androgens, in general, tend to promote retention of sodium and water, patients receiving Methyl Testosterone, in particular elderly patients, should be observed for edema.

Hypercalcemia may occur, particularly in immobilized patients: use of Testosterone should be discontinued as soon as hypercalcemia is detected.

References: 1. **Montesano, P., and Evangelista, I.** Methyltestosterone-thyroid treatment of sexual impotence. Clin Med 12.69, 1966. 2. **Dublin, M. F.** Treatment of impotence with methyltestosterone-thyroid compound. West Med 5:67, 1964. 3. **Titeff, A. S.** Methyltestosterone-thyroid in treating impotence. Gen Prac 25:6, 1962. 4. **Hellman, L., Bradlow, H. L., Zumoff, B., Fukushima, D. K., and Gallagher, T. F.** Thyroid-androgen interrelations and the hypocholesteremic effect of androsterone. J Clin Endocr 19:936, 1959. 5. **Farris, E. J., and Colton, S. W.** Effects of L-thyroxine and liothyronine on spermatogenesis. J Urol 79:863, 1958. 6. **Osol, A., and Farrar, G. E.** United States Dispensatory (ed. 25). Lippincott, Philadelphia, 1955, p. 1432. 7. **Wershub, L. P.** Sexual Impotence in the Male. Thomas, Springfield, Ill., 1959, pp. 79-99.

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In memoriam

Clarence Baker, MD
Detroit

Retired Detroit physician, Clarence Baker, MD, died May 23 at the age of 91. He had made his home the past 15 years in Bradenton, Fla.

Doctor Baker, a graduate of the Maine Medical School, had practiced in the Redford area near Detroit for 35 years before retiring in 1957. He was a consulting physician at Detroit's Maybury Sanitorium for 25 years and was a life member of MSMS. He specialized in ophthalmology and otorhinolaryngology.

Catherine C. Corbeille, MD
Detroit

Catherine C. Corbeille, MD, Detroit, one of the first three women physicians to graduate from the Detroit College of Medicine, died May 14 at the age of 75.

Doctor Corbeille was an internist and a member of the American Society for the Study of Sterility, the Alumni Society of the Mayo Clinic and the New York Academy of Science. She was affiliated with Hutzel Hospital, Detroit, was the wife of Mark R. McQuiggan, MD, Detroit, and the mother of Mark C. McQuiggan, MD.

John K. Hickman, MD
Dowagiac

Retired Dowagiac physician John Kerschner Hickman, MD, who served his community for 34 years, died May 19 at the age of 66. He had been retired since 1970.

Doctor Hickman was a graduate of Wayne State University School of Medicine. He was a member of the American Academy of General Practitioners. He was affiliated with Lee Memorial Hospital, Dowagiac, and was a past president of the Cass County Medical Society.

William G. Robinson, MD
Grand Rapids

William Gordon Robinson, MD, former Hart physician but lately of Grand Rapids, died April 18 at the age of 60. Doctor Robinson was former secretary of the Oceana County Medical Society and had served as a delegate to MSMS.

He was a graduate of Northwestern University School of Medicine and had served in Hart until the late 1950s when he became superintendent of Memorial Hospital, Fatehgarh, India, under the United Presbyterian Church. He was a member of the Indian Medical Society and the American Academy of General Practice.

Chad A. Van Dusen, MD
Ogden Center

Long-time Adrian-area physician, Chad A. Van Dusen, MD, died May 12 at the age of 88.

Doctor Van Dusen was a graduate of the University of Michigan Medical School, and had been affiliated with Emma L. Bixby Hospital in Adrian. He was a 50-year member of the Lenawee County Medical Society.

Edwin M. Williamson, MD
Kalamazoo

Edwin Moore Williamson, MD, Kalamazoo psychiatrist, died May 12 at the age of 61. He was a graduate of the University of Michigan Medical School and was a diplomate of the American Board of Psychiatrists.

Doctor Williamson was affiliated with Plainwell Sanitarium, Bronson and Borgess hospitals in Kalamazoo, and was a member of the Michigan Society of Neurology and Psychiatry and the World Medical Association.

C. Stuart Wilson, MD
Alpena

A Michigan physician for 65 years, C. Stuart Wilson, MD, Alpena, died May 19 at the age of 88. Doctor Wilson had practiced 40 years in Detroit before moving to Alpena.

Doctor Wilson had been affiliated with Grace Hospital and was president of the Detroit Housing Commission in 1933-1936. He was a past national president of Phi Rho Sigma medical fraternity, and a member of the University of Michigan Alumni Society national governing board. In 1968 he received the university's distinguished alumni service award.

An internist, Doctor Wilson was a graduate of the University of Michigan Medical School. He had practiced in Tacoma, Wash., and was a former president-elect of the Washington State Medical Society.

Doctor Wilson was a clinical professor of medicine at Detroit College of Medicine, was a fellow of the American College of Physicians, a member of the Michigan Heart Association and chairman of the Alpena Heart Unit.

Sound Off

Physicians-
let's make the point about safety glass!

By Robert H. Chesky, MD
Ann Arbor

Items in the news and daily experience of a pediatrician:

—Four-year-old boy dead on arrival at Seaway Hospital in Trenton from severed jugular vein.

—Ann Arbor teen-ager arrives at emergency room in shock, requires five units of blood and 125-150 sutures.

—Ann Arbor toddler lacerates cornea, has lens removed in subsequent surgery; future vision in doubt.

—Ann Arbor junior high school student requires 180 arm and wrist sutures following lacerations sustained *at school.*

The common denominator of all these injuries?

All of these youngsters suffered and one died because of encounters with the dagger-like broken fragments of ordinary or annealed glass, used inappropriately in storm doors, sliding glass doors, and—yes, even in the doors of our public schools.

These local incidents may be extreme, but they illustrate graphically an ever-increasing toll of injury and death nationally, as the use of architectural glass has spread from California and Florida to the rest of the nation in the past several decades.

About 250,000 such injuries and 125-150 deaths occur each year from the use of ordinary glass in dangerous locations, according to estimates of the U.S. Public Health Service's injury surveillance system. About half involve children and young people. The vast majority could be prevented by the use of safety glass. The economic price on this number of injuries must be staggering; surgical services in hospital emergency rooms seldom are free.

This situation adds up to a clear and present danger to the American public. Fortunately, three trends are at work which suggest a brighter future—if physicians and others will work for it.

1. Safe substitutes—plastics, tempered glass, laminated glass, and wire mesh glass—are now available for use at increasingly competitive prices.

2. There is increasing public awareness of the danger of annealed glass in dangerous places, particularly storm doors, which account for nearly half of all glass injuries. Physicians can do much to accelerate this trend by distributing educational materials to their patients. These are available from the Consumer Glass Safety Committee, the nerve center of the safety glass movement. The address is: One Gateway Center, Pittsburgh, Pa. 15222.

3. More than 15 states have passed a National Safety Council-sponsored model state law, which has two major provisions. In *new* homes and public buildings, safety glass would be required in storm doors, full-length glass doors, bathtub enclosures, and full-length panels adjacent to glass doors. In *old* structures, safety glass would have to be used in these specified dangerous locations following breakage or substantial remodeling.

Although this law is far from draconian and represents a gradualistic approach, it is opposed by powerful interest groups with an economic stake in glass that breaks as frequently as possible. These interests have members in the Michigan Legislature. During the current session, the Senate killed the bill, the House gutted it, and the Governor remained silent.

The AMA has commended this bill to the state societies, and national support also has been given by the American College of Surgeons, the American Academy of Pediatrics, the U.S. Public Health Service, the International Brotherhood of Painters and Allied Trades (AFL-CIO), the Bureau of Product Safety of the FDA, and numerous industry groups. In Michigan, the plastic surgeons and the emergency physicians joined the pediatricians in supporting this model bill. Plainly, from the results, much more needs to be done.

As the 1970 report of the National Commission on Product Safety so cogently stated:

Doctor Pfaff

"The glass door is a classic example of a product which predictably will be 'misused.' As misuse is foreseeable and the danger avoidable, the risk is unreasonable."

If physicians can help make this point to their patients and to their elected officials, we will have done a great service to the public—and to those citizens of the future who will be killed and maimed if we don't.

Doctor Chesky is chairman, Committee on Legislation, Michigan Chapter, American Academy of Pediatrics.

Physicians must take aggressive attitude in face of changes

(The following editorial appeared in the May issue of the Rocky Mountain Medical Journal, *and is reprinted here with permission.)*

By John Pfaff, Jr., MD
President, Montana Medical Association

"All I want is to care for the sick as I have done in the past—let someone else worry about the health care delivery system," argued a capable physician friend of mine as he sat in my office fuming over the latest Medicare directive he had recently received.

I could not help but feel sympathy for his cause since I know him to be totally devoted to high quality care of his patients. I could not express compassion, however, since I also know him to be totally uninvolved with the socio-economic problems confronting organized medicine—problems directly related to whether or not he may continue to provide quality care for his patients. In the doctors' lounge he is vehement in criticism of the American Medical Association and organized medicine in general. He is, of course, reluctant to accept majority decisions reached by those of our local medical society at meetings he "hasn't time" to attend unless by chance those decisions should reflect his views.

Both he and I share the same desire—that in our country good medical care shall be available to all. The basic difference between us is that he is unwilling to fight effectively to preserve it. To me, it is clearly evident that we are in a period of turmoil and uncertainty brought about mainly as a result of the voting public (our patients) who by a majority decision have decreed that our medical services shall be an inalienable right to be received without stigma of charge. This does not necessarily imply that medical care will degenerate or that physicians of the future need have less than total devotion to the practice of medicine; it does imply that our manner of providing care will be altered drastically. Whether this will, in the final balance, be good or bad may depend to a great extent on how much effort we exert in meeting the challenge of these changing attitudes.

The principles of a good medical care delivery system need not be subservient to bureaucratic welfare state concepts if an aggressive attitude is assumed by a strong majority of we physicians who are willing to devote time and effort in behalf of protecting them. Do we not owe our patients just as much effort in this regard as we would offer them in treating their illness?

No bad idea is ever overcome by attacking the person who proposes it. A physician standing on the sidelines who is unwilling to be part of and governed by a majority decision—who is unwilling to meet with others to discuss the problem and who at the same time throws brickbats at those he dislikes—creates the disunity that those who would destroy our cause hope for. A profession united within the confines of our existing medical organization and therein expressing opinions known to represent a strong majority of physicians will be heard by a concerned public. If democracy is to prevail, we will then be listened to by our congressmen. I am convinced that in this time of crisis we owe our patients whatever time and effort is necessary to insure that they have an adequate health care delivery system. How can they receive good medical care otherwise?

When my physician friend asked, "How do you propose to alter this rush toward bureaucratic socialism?", I could only answer by quoting Edmond Burke who so aptly said, "The only thing necessary for the triumph of evil is that good men do nothing."

'We need a new Medicaid'

"Medicaid stinks because it gets doctors mired in paperwork instead of patients.

"It stinks because it works in a way that discourages doctors from caring for the poor.

"It stinks because its controls are ill-conceived and ill-applied.

"We need a new Medicaid system. Computers may help us out of the mess by giving us instant-answers to such questions as which cases should be paid for and which shouldn't, how long patients should be kept in hospitals, and which doctors are abusing the system.

"But no matter what sort of system we have, the cost of going to a hospital will keep right on soaring. We may be able to slow down the spiral, but we will never reverse it. Some way, all of us will have to pay the cost of our miracle medical care."

(Editor's Note: The above is a portion of an editorial in the *Pittsburgh Post-Gazette.*)

Benton Harbor paper warns of costs of national insurance

If compulsory national health insurance is adopted . . . "subsidies would be tax money; lots of it," declared a recent Benton Harbor *News Palladium* editorial.

The editorial concludes:

"This is the year when campaigning politicians don't mind how much of your money they spend to buy your vote. It has been estimated that the most common proposal for all-out nationalized compulsory health insurance would increase the average family's federal tax bill for health programs alone to more than $1,200 a year. And reduce your dignity as a patient and the quality of care you get. If you buy that, you have no one but yourself to blame."

Doctor Roth asks for cooperation

"The greatest threat to American medicine today is not outside our profession, but within it.

"If there are things which are not clearly right in the policies of our major medical organization, the work of those who disagree can set them right. The need is for cooperative, constructive strengthening of the position of a great profession.

"With that strength we need not fear external assaults."

(Excerpt from an editorial by Russell B. Roth, M.D., Speaker of the AMA House of Delegates, in December 1971 bulletin of Erie County Medical Society.)

Doctor Nanzig

Doctor Brewer

Thoughtfulness

By Reinard Nanzig, MD
Grand Rapids

When I was a junior medical student it was a policy of the professor of surgery to assign each student to a surgeon who acted as our preceptor. I had the good fortune to be assigned to Dr. Sumner L. Koch, who was an internationally renowned hand surgeon. He invited me to attend sessions of his hand clinic at Cook County Hospital where the majority of the patients were human derelicts from the West Madison Avenue area. On one occasion Dr. Koch removed the bandages of a man suffering from a human bite infection, and treated the wound. Before replacing the bandages and splint, he took his bandage scissors and carefully trimmed and cleaned the man's finger nails. I have always remembered this small act of thoughtfulness by such a great man.

Recently an elderly woman told me how she had suffered a fracture many years ago and had a rather extensive cast on through the summer months. When it was time to change the cast, she looked forward to a bathing of the parts involved and was bitterly disappointed when no heed was paid to her request. Through the years she has always remembered what she felt was an act of thoughtlessness.

Our Kent County Medical Society Ethics Committee receives a number of complaints about doctors each year, and the majority of them are based on problems no more serious than the above example. The lack of consideration, the callous or cutting remark, the apparent indifference to the patient or his family are the factors which so often cause people to write letters to the Medical Society or, more seriously, prompt them to consult lawyers regarding malpractice or negligence suits. It is my understanding that the experience at the state level is quite similar and that most of the problems encountered are due to misunderstanding and lack of consideration rather than actually poor medical treatment.

Few of us will ever be as outstanding medically as Dr. Koch, but without question we can all try to be as thoughtful.

(This article is reprinted, with permission, from the May issue of the Kent County Medical Society Bulletin.)

Physicians can have best PR at bargain prices

By Walter Brewer, MD
Chairman, PR Committee
Kentucky Medical Association

(The following article is reprinted, with permission, from the May issue of the JOURNAL of the KENTUCKY MEDICAL ASSOCIATION.)

The practicing physician in the United States ought to have the world's greatest public image, yet he does not. The reasons are all too apparent. There are those with ulterior motives who wish to discredit the medical profession. Public relations is too often thought of as high-powered to attain massive results. This type of public relations is a mediocre second-best to the type that is available to each of us at bargain-basement prices.

Each of us sees, and most importantly has the complete attention of several dozen public relations recipients daily. These are our patients, their families, and people who come with them to our offices. The initial impression made by our receptionists and nurses, and later by us will do more in our behalf than all the paid public relations efforts combined! This is obvious when an overwhelming majority of people surveyed liked their *own* physician, felt *his* charges were in line, felt he *gave* them enough time and was *competent;* conversely, in describing medicine in general the reverse was true down the lines.

This means we succeed admirably with people we get to know well enough to call patients, and terribly with the rest. It is this "rest" group we must reach. These are the ones that never get past the brusque receptionist, the angry nurses or overbearing bookkeeper. The ones we haven't taken adequate time with to explain problems in understandable terms. It is rarely the big things that cause hard feeling—rather, it's the minor misunderstandings.

When a potential patient understands how little can be done for him on house calls when compared to an office or emergency room visit, he is usually more than willing to make the trip and be grateful rather than resentful for the extra inconvenience. When he merely gets a "no, I don't make house calls," he feels first, like a captive audience who has no say in the matter and secondly, a little bit "had" by the extra time, expense and inconvenience. The difference is in understanding and communication.

The efforts we expend to reach these misunderstood people through our office and hospital staffs and our own personal contacts will be more than generously repaid by the truly positive public relations generated. And not only that, it makes good sense.

Quiz

1. What are medical educators advising now about the diagnosis and treatment of degenerative joint disease?
2. What are some of the most successful techniques that a family physician can use in sexual counseling?
3. What's the latest on immunizations?
4. What are the best surgical approaches to coronary disease?
5. How serious are the clinical consequences of environmental abuse?

For the answers to these questions and others, decide today to participate in the MSMS Annual Session in Detroit, October 1-5. Block out your appointment book now.

AUG 4 1972

MEDIGRAMS

LATE NEWS FROM THE MICHIGAN STATE MEDICAL SOCIETY

Michigan Medicine

July 19, 1972, Volume 71, Number 21
Michigan State Medical Society

SPECIAL ISSUE ABOUT MEDICAID PROGRAM . . .

MEMBERS WILL BE INTERESTED in the 24 questions raised July 7 in an inquiry sent by MSMS to the State Department of Social Services about the new Michigan Medicaid program.

An official of the State Department informed MSMS July 17 that a draft of the answers has been prepared and will be delivered soon. The document will be sent on to Council members for study before their August 4-5 meeting, and then will be sent to all members August 7-8 along with information about Council actions.

The MSMS Council, in special session July 6, decided to ask the State for written answers to questions about the Provider Agreement Form, payment mechanisms, and other aspects of the program.

COUNCIL MEMBERS FELT that physicians needed more information to help them decide whether or not to sign the Provider Agreement Form being sent by the State to all doctors of medicine and osteopathy in Michigan. The program will be effective August 1 in Ingham, Genesee and Eaton counties, and on October 1 in the entire state.

Medicaid developments will be studied further by the MSMS Council Aug. 4-5 and answers to the 24 questions will be transmitted to the membership immediately thereafter.

FOLLOWING ARE THE QUESTIONS asked by MSMS:

1. Does the Federal law require physicians who provide Medicaid services to sign the Provider Agreement? If so, please cite the Federal Statute and explain why the State hasn't required the Agreement previously?

2. What obligations does a physician assume when he signs the Provider Agreement?

3. If a physician signs the Provider Agreement, does he become an employee of the state even on a part-time basis?

4. Who will have knowledge of the list of enrolled physicians who sign the Agreement? Will it be used to refer patients to physicians who accept the Medicaid patients? Will the list be public or private information?

5. Will physicians who do not sign the agreement, but often treat patients in the hospital emergency rooms (radiology, pathology, etc.) without knowledge of their financial status, receive payment for services to Medicaid patients?

6. When a physician feels he has been unjustly dealt with by the Medicaid Program, what appeal mechanisms exist to him?

7. If a physician signs a Provider Agreement, must he accept Medicaid patients?

8. If a physician has an established patient who is a Medicaid recipient but the physician chooses not to sign the Provider Agreement, will he be paid for service to that established patient after August 1?

9. Explain how the reimbursement to physicians will be calculated?

10. Will any physician receive a lesser fee for services than previously? If so, please explain.

11. Does the new system use the individual physician profile in calculating reimbursements?

12. Are medically indigents (Category II) eligible for the same benefits as all other Medicaid recipients?

13. What new benefits are covered in the new program?

14. What previously covered benefits have been eliminated?

15. Have additional funds been allocated to cover more Medicaid recipients and more procedures?

16. What are the differentials in payment to generalists and specialists?

17. What has been done to facilitate easier completion of physicians' forms for Medicaid patients?

18. Doctors often find that Medicaid patients require special attention for conditions other than the immediate complaint (i.e., pregnant girls who may require diets or other special treatment). What provisions are made for this time-consuming and additional burden upon the physician?

19. Computers are obviously uniform and rigid because they are machines. What arrangements are made for situations that require individual considerations?

20. Why is out-patient psychiatric care not included?

21. We understand that reimbursements will still be made within geographic regions, rather than the previously discussed statewide uniform fee schedule. Why was this decision made?

22. Physicians have believed for some time that many Medicaid patients tend to over-use their program. What does the Department of Social Services plan by way of educational programs to reduce over-utilization?

23. Why must a provider retain his records for a period of six years?

24. What is meant by the statement that authorized State or Federal personnel will have access to the provider's records? When will this access be sought? How and by whom?

* * *

IF ANY MSMS MEMBER has other questions, he is invited to mail them immediately to MSMS Department of Government Relations, 120 W. Saginaw, East Lansing, Mi 48823.

EXPLANATION OF MEDICAID PAYMENT MECHANISM TO BE USED BY STATE

The Department of Social Services has been directed to handle the fiscal aspects of the Medicaid program (now administered by Michigan Blue Shield). The State will phase in Ingham, Genesee and Eaton counties Aug. 1, and will cover the entire state on October 1.

The State Department has sent a Provider Agreement Form to each physician in the three counties and has asked that it be signed and returned. The Department is functioning under PL 90-248, Title 19, Section 1902, Paragraph 27 in this requirement. The State Department assures MSMS that physicians who sign the Provider Agreement Form are not required to accept Medicaid patients. The doctor has the same choices as he has now, but in order to receive payment the form must be on file with the state, except in cases of emergency care.

Medicaid payments under the new system will be made on a prevailing screen basis within the same four regions previously established by Blue Shield. Payments will not be pegged to the physician's profile, but all doctors billing the same fee for the same procedure in the same region reportedly will be paid the same.

The Department of Social Services informs MSMS that it will pay individual physicians either the charge submitted by the physician or the fee at the prevailing level, whichever is lower. State Department officials insist that no doctor will receive less payment per procedure than under the present Medicaid program. The State has been asked to comment further on several fee questions.

The State Department of Social Services has added a number of new procedures as benefits. These will include immunizations, sterilizations, outpatient office calls for Group II, pre- and post-partum care, Pap smears, and others. MSMS has advocated these improvements in medical care for the Medicaid patients.

(Note: This issue is devoted to developments in the "new" Medicaid program. See pages 1-2-3. -- Editor)

Quiz

1. What are medical educators advising now about the diagnosis and treatment of degenerative joint disease?
2. What are some of the most successful techniques that a family physician can use in sexual counseling?
3. What's the latest on immunizations?
4. What are the best surgical approaches to coronary disease?
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July 19, 1972 Vol. 71, No. 21

Michigan Medicine

MICHIGAN STATE MEDICAL SOCIETY

Published three times each month and four times in December and January, 38 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Mich. and at additional mailing offices. Yearly subscription rate, $9.00. Printed in USA. All communications should be addressed to the Publications Committee, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823.

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Phone: Area Code 517, 337-1351.

EDITOR: HERBERT A. AUER

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MEDIGRAMS

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Michigan Medicine

July 31, 1972, Volume 71, Number 22
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MSMS COUNCIL TO CONSIDER MEDICAID QUESTIONS AUGUST 4-5

"THE MSMS COUNCIL is expected to make a decision re the Medicaid program at the two-day midsummer meeting, August 4-5," declares Brooker L. Masters, MD, Chairman of the MSMS Council.

The "new" program, with the Michigan Department of Social Services taking over the role of fiscal intermediary for Medicaid, goes into effect October 1 across the state and in the three-county test area of Ingham, Genesee and Eaton counties on August 1. Each component medical society has been invited to send its president or a representative to confer with The Council. "The Council will have a full discussion, consider the various alternatives, and I hope adopt a position."

The MSMS Council in special session July 5 discussed the Medicaid matter and decided to ask the State Department of Social Services some questions in order to get specific answers about the Provider Agreement Form, the reimbursement mechanism, new benefits, etc. The Council felt that physicians needed more information before deciding to sign or not to sign the Provider Agreement Form. Twenty-four questions were directed to the State. Answers have been received from the State Department of Social Services and were sent to Council members for their review before the August 4-5 meeting. Copies also have been sent by Doctor Masters to the presidents of the component societies and to the members in Ingham, Genesee and Eaton.

The Council decision and the answers to the 24 questions will be transmitted to the membership immediately thereafter.

PHYSICIANS ARE URGED to block out their appointment books now for the MSMS Annual Session in Detroit, October 1 through 5 at the Sheraton Cadillac Hotel. The House of Delegates will be in session October 1-2-3 and the outstanding scientific program will be offered October 3-4-5. This continuing medical education activity is offered as a member service, with no registration charge.

THE NEXT ISSUE of Medigram will contain details about Public Law No. 91-601, the Poison Prevention Packaging Act of 1970 which requires child-resistant safety containers for substances hazardous to children. The new federal regulations will become effective August 25 with other later dates for phasing in aspects of the FDA regulations.

COUNTY MEDICAL SOCIETY leaders soon will receive invitations to participate in a Workshop on Drug Abuse and Alcoholism to be held Sept. 19 and 20 in the Kellogg Center in East Lansing under sponsorship of MSMS, the Michigan Office of Drug Abuse and Alcoholism, and other organizations. Governor Milliken will be among keynote speakers.

UNFAIR LABOR PRACTICE charges filed in 1970 against the Michigan Nurses Association have been dismissed by the Michigan Employment Relations Commission which accepted the recommendation of the Trial Examiner. The charges alleging conspiracy by MNA to deny members their collective bargaining rights were filed in September, 1970 by 40 nurses seeking decertification of the Association from its collective bargaining contracts.

REPRINTS of the THANK YOU FOR NOT SMOKING card that appeared in the July issue of *Michigan Medicine* as a part of a new MSMS public educational effort are available on request from the MSMS Department of Communications. The MSMS anti-smoking campaign will continue with letters to hospitals urging the discontinuance of cigaret sales, spot announcements to radio stations, and distribution of materials to junior high schools. The MSMS Council approved a detailed program recommended by the MSMS Committee on Public Relations.

COMPONENT SOCIETIES are invited by MSMS Council Chairman Brooker Masters, M to suggest members through MSMS to the AMA for possible appointment to AMA councils and committees. Interested members or component societies may phone MSMS (Office of the director) for information about openings, about the AMA request for biographic information, etc.

THE MSMS COMMITTEE on Occupational Health urges all MSMS members to become familiar with the provisions of the Occupational Safety and Health Act of 1970 because this federal Act imposes responsibilities on the physician both as an employer and as a provider of services in the field of occupational health. The AMA has developed an excellent analysis of this act and copies are available from MSMS headquarters, (Department of Government Relations).

PHYSICIANS WHO ARE BEING SOLICITED for listing in the "U.S. Medical Directory" should be aware that this is not the AMA's *American Medical Directory*

NO MDs WILL BE DRAFTED into the armed forces this fiscal year, according to Assistant Defense Secretary Richard Wilbur, MD. Doctor Wilbur said the physician supply in the military will be sufficient, as matters now stand, to last through the fiscal year that began July 1. Some 1,600 physicians were drafted in 1971.

STATE MEDICAL SOCIETY of Wisconsin will assess its 4,400 members $10 each to finance a campaign to inform Wisconsin legislators and citizens of chiropractic's threat to public health. Levy was authorized by the recent SMSW House of Delegates.

A $100-PER-MEMBER ASSESSMENT was voted by the Utah State Medical Assn. to finance a campaign opposing the practice of chiropractic in the state.

A MANDATORY continuing medical education program will begin July 1 for members of the Pennsylvania Medical Society. PMS members will have three years to qualify for the AMA Physician's Recognition Award, which will be a prerequisite for membership.

July 31, 1972 Vol. 71, No. 22

Michigan
Medicine

MICHIGAN STATE MEDICAL SOCIETY
Published three times each month and four times in December and January, 38 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Mich. and at additional mailing offices. Yearly subscription rate, $9.00. Printed in USA. All communications should be addressed to the Publications Committee, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. © 1972 Michigan State Medical Society. Phone: Area Code 517, 337-1351.

EDITOR: HERBERT A. AUER

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Michigan Medicine

August 9, 1972, Volume 71, Number 23
Michigan State Medical Society
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COUNCIL COMMITTEE, STATE OFFICIALS TO NEGOTIATE AUG. 10

From Brooker L. Masters, MD, Chairman
Michigan State Medical Society Council

Here is another progress report re Medicaid . . .

A special committee of the MSMS Council, authorized by the MSMS Council August 5, has been appointed to confer with officials of the Michigan Department of Social Services about possible changes in the "new" Medicaid program.

The conference with the Social Service officials will be held Thurs., August 10.

The Council directed the committee to negotiate with State Department officials about the provider agreement and certain regulatory phases of the new program.

The special committee, appointed by the Council Chairman, will include President Sidney Adler, MD; President-Elect John J. Coury, MD; Council Finance Chairman Ernest P. Griffin, MD, and Council Chairman Brooker L. Masters, MD.

Further communications will be sent to every member.

The State Department of Social Services on October 1 will take over the fiscal aspects of the Medicaid program in Michigan. The State phased in a three-county test area of Ingham, Genesee, and Eaton on August 1.

The Council on Aug. 5, in considering the new Medicaid program, studied all communications received from component societies and individuals, discussed various legal aspects with the MSMS legal counsel, studied the answers from the State Dept. to 24 questions raised by The Council. The Council heard comments from 11 component society representatives, and a representative of the Council on Medical Specialties, and a representative of the Wolverine Medical Society at the summer meeting.

The Council at its meeting July 5 directed questions to the State Department in order to provide more information for the physicians so they could consider whether to sign or not to sign the provider agreement.

* * *

Here are the answers from Stuart M. Paterson, Deputy Director, Department of Social Services, to questions raised by MSMS:

QUESTIONS FROM MSMS

1. DOES THE FEDERAL LAW REQUIRE PHYSICIANS WHO PROVIDE MEDICAID SERVICES TO SIGN THE PROVIDER AGREEMENT? IF SO, PLEASE CITE THE FEDERAL STATUTE AND EXPLAIN WHY HASN'T THE STATE REQUIRED THE AGREEMENT PREVIOUSLY?

   Yes. Section 45 CFR 250.21 states that "A State Plan for Medical Assistance under Title XIX of the Social Security Act must provide for agreements with every person or institution providing services under the State Plan . . ."

(Continued on next page)

Its major purpose, however, is to provide the Department with information necessary to permit the prompt payment of Medicaid claims.

The agreement has been a federal requirement from the outset of the program, but has not been adhered to.

The attached agreement has been noted to indicate the specific law or regulatory sections requiring each provision.

(Note from MSMS Legal Counsel: "While the State answer to #1 is correct, our examination of federal statutes and regulations relating to Medical Assistance Programs reveals that the State does have the choice of determining the structure and mechanics of obtaining agreements from each provider. The State has elected to utilize the one-time agreement, in lieu of an individual claim form agreement, as used presently in the state-operation directed by Blue Shield.)

2. WHAT OBLIGATIONS DOES A PHYSICIAN ASSUME WHEN HE SIGNS THE PROVIDER AGREEMENT?

   The only obligation a physician assumes upon signing the agreement is to agree to its terms for those Medicaid recipients he chooses to see. The agreement does not obligate him to practice in any other manner than he desires.

   A physician is under no immediate obligation when he signs the provider agreement. Any physician who does sign and subsequently provides service to an eligible recipient is asked to do so in accordance with the conditions stated in the agreement.

3. IF A PHYSICIAN SIGNS THE PROVIDER AGREEMENT, DOES HE BECOME AN EMPLOYEE OF THE STATE EVEN ON A PART-TIME BASIS?

   No.

4. WHO WILL HAVE KNOWLEDGE OF THE LIST OF ENROLLED PHYSICIANS WHO SIGN THE AGREEMENT? WILL IT BE USED TO REFER PATIENTS TO PHYSICIANS WHO ACCEPT MEDICAID PATIENTS? WILL THE LIST BE PUBLIC OR PRIVATE INFORMATION?

   Although the Federal government encourages states to make a list of enrolled physicians available in each county office, we do not plan to do so at this time. Any consideration to do so at a later date will be discussed with professional societies.

   For the present, the list of enrolled physicians will be limited to use by the Bureau of Medical Assistance.

18. DOCTORS OFTEN FIND THAT MEDICAID PATIENTS REQUIRE SPECIAL ATTENTION FOR CONDITIONS OTHER THAN THE IMMEDIATE COMPLAINT (I.E., PREGNANT GIRLS WHO MAY REQUIRE DIETS OR OTHER SPECIAL TREATMENT). WHAT PROVISIONS ARE MADE FOR THIS TIME-CONSUMING AND ADDITIONAL BURDEN UPON THE PHYSICIAN?

Unless a separate procedure code is indicated for the service provided, these should be included as part of the office call.

19. COMPUTERS ARE OBVIOUSLY UNIFORM AND RIGID BECAUSE THEY ARE MACHINES. WHAT ARRANGEMENTS ARE MADE FOR SITUATIONS THAT REQUIRE INDIVIDUAL CONSIDERATIONS?

Individual consideration is available to every physician. These claims will be manually reviewed by a staff of physicians.

20. WHY IS OUTPATIENT PSYCHIATRIC CARE NOT INCLUDED?

At the present time, psychiatric care is available only for persons 65 and over in an institution environment. A plan to expand these services to all recipients is subject to approval by the Legislature and the availability of funds.

21. WE UNDERSTAND THAT REIMBURSEMENTS WILL STILL BE MADE WITHIN GEOGRAPHIC REGIONS, RATHER THAN THE PREVIOUSLY DISCUSSED STATEWIDE UNIFORM FEE SCHEDULE. WHY WAS THIS DECISION MADE?

Geographic reimbursement more closely follows present payments. Fees for the same procedure vary as much as 35% between regions in the State as noted in the May issue of "Michigan Medicine" pages 472-3. At present, a state-wide fee would appear to penalize some physicians and provide inflationary inpetus in other regions.

22. PHYSICIANS HAVE BELIEVED FOR SOME TIME THAT MANY MEDICAID PATIENTS TEND TO OVERUSE THEIR PROGRAM. WHAT DOES THE DEPARTMENT OF SOCIAL SERVICES PLAN BY WAY OF EDUCATIONAL PROGRAMS TO REDUCE OVER-UTILIZATION?

- Surveillance programs are established to detect misuse of Medicaid by individual recipients.
- Providers are encouraged to report over utilization to the Department of Social Services for investigation.
- Case workers are being better informed of coverages and limitations and are explaining the program to recipients.
- Brochures are being prepared for recipients.

23. WHY MUST A PROVIDER RETAIN HIS RECORDS FOR A PERIOD OF SIX YEARS?

The six year requirement was imposed on the advice of the Attorney General's office. The period is consistent with the State's statute of limitations.

24. WHAT IS MEANT BY THE STATEMENT THAT AUTHORIZED STATE OR FEDERAL PERSONNEL WILL HAVE ACCESS TO THE PROVIDER'S RECORDS? WHEN WILL THIS ACCESS BE SOUGHT? HOW, AND BY WHOM?

Under the Federal Social Security Act, Section 1902 Part A, a State Plan for Medical Assistance must: (27) provide for agreements with every person or institution providing services under the State Plan under which such person or institution agrees (A) to keep such records as are necessary fully to disclose the extent of the services provided to individuals receiving assistance under the State Plan, and (B) to furnish the State agency with such information, regarding any payments claimed by such person or institution for providing services under the State Plan, as the State agency may from time to time request. Certain authorized personnel of the State Department of Social Services or Federal Department of Health, Education and Welfare may view a provider's records. These personnel will be interested in only those records which document services to Medicaid recipients. There are no definite plans on frequency of review of a provider's records; it is expected, however, that any visits will be pre-announced. In isolated cases, where fraud or system abuse is suspected, there will be a need for post payment surveillance of provider records. We have several cases of this nature under investigation at this writing.

August 9, 1972 Vol. 71, No. 23

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OFFICIAL JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY • VOLUME 71, NUMBER 24 • AUGUST, 1972

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Special Inside: Digest of Proceedings
from Spring, 1972, MSMS House of Delegates
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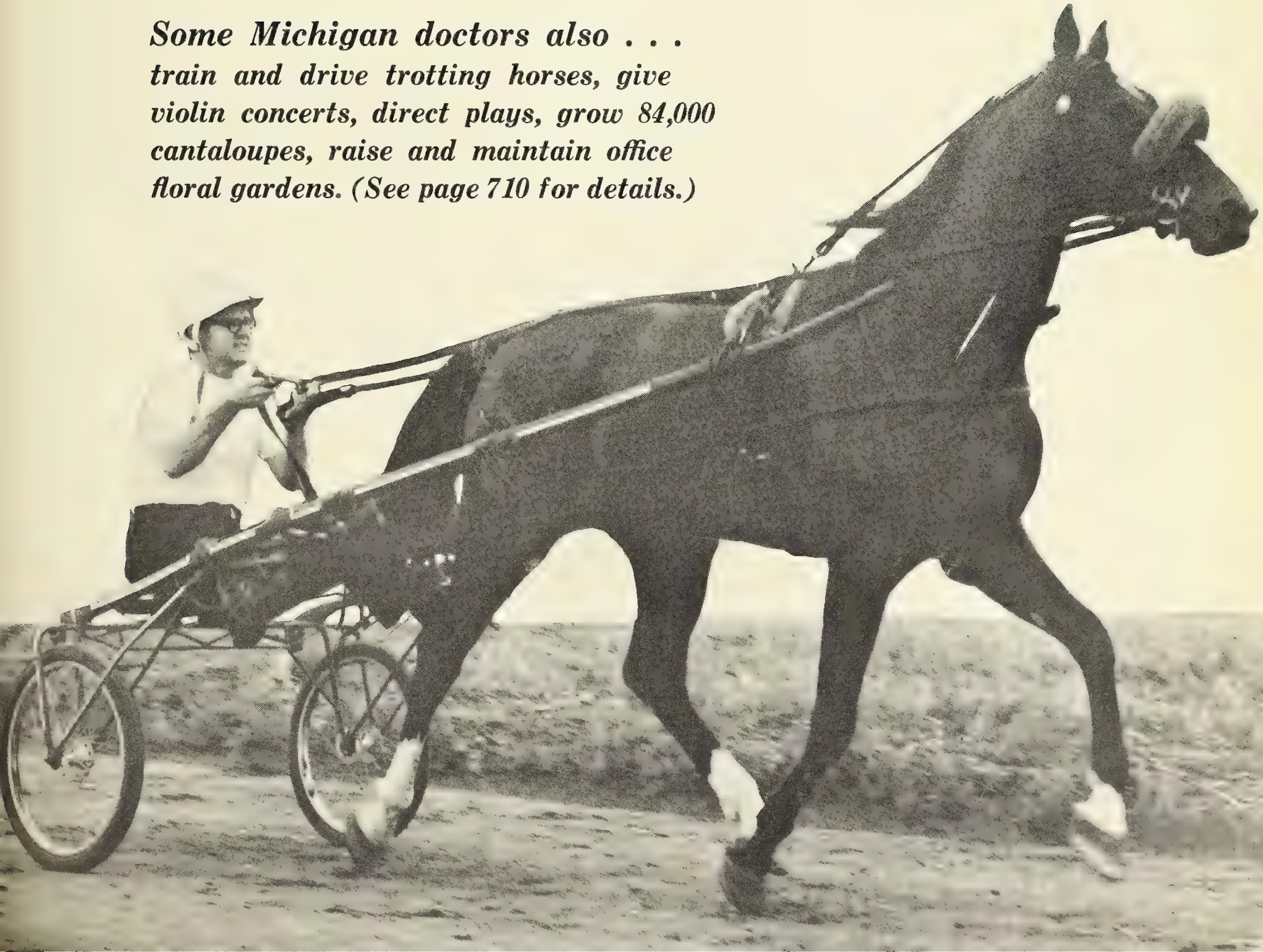

Some Michigan doctors also . . .
train and drive trotting horses, give violin concerts, direct plays, grow 84,000 cantaloupes, raise and maintain office floral gardens. (See page 710 for details.)

Everybody experiences psychic tension.

Most people can handle this tension.

Some people develop excessive psychic tension and need your counseling,

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Before deciding to make Valium (diazepam) part of your treatment plan, check on whether or not the patient is presently taking drugs and, if so, what his response has been. Along with the medical and social history, this information can help you determine initial dosage, the possibility of side effects and the ultimate prospects of success or failure.

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Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

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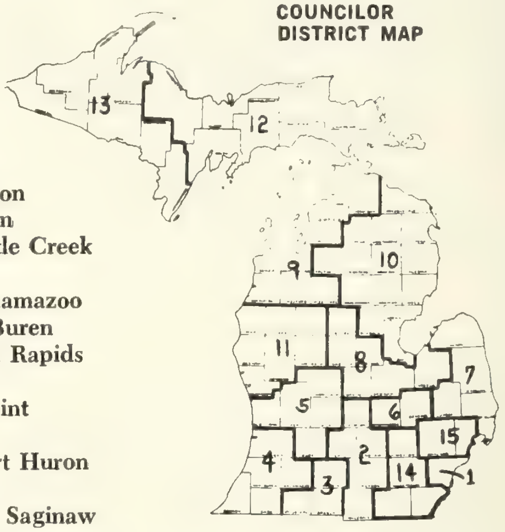
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President's page

Physician's letter raises Medicaid issues

Sidney Adler, MD
MSMS President

I have received several letters about the changes in the Medicaid program, as administered by the state Department of Social Services. In a letter from one physician, dated July 10, there are points made with which we all can agree. But his conclusion, in my opinion, is insupportable.

The things on which we can agree, few of which are very important, are that the Medicaid Participation Agreement as proposed presents a problem; it is one-sided, inadequate and would subject participating physicians to the control of the Department of Social Services; it interferes with the normal physician-patient relationship to an unreasonable extent; and the demand by the Department of Social Services that such agreements be executed by the physician may lack legal support.

Things upon which we disagree, are the propriety of collective bargaining which assumes that physicians are "employees" of the state and subject to the state's control with respect to compensation, working conditions, and methods of performance of their medical responsibilities; the propriety, under its constitution and bylaws, of the state society or of any county society becoming a bargaining agent, if bargaining is possible; and whether any benefits can be derived by physicians through the bargaining process.

I am not familiar with any federal or state law which would require that the procedure followed by Blue Shield as fiscal agent must be changed. Physicians were not then and are not now being made to sign participating agreements; nevertheless, they are being paid.

I understand the law to be that a physician rendering service under Medicaid is entitled to no more or less than "reasonable charges for services rendered—determined by the state department and . . . not more than those paid in this state for services rendered under Medicare." (Medicaid Law §109, Compiled Laws 400.109).

In his July 10 letter, that physician made a good point when he wrote that it may be possible to challenge the department's position that participating agreements are necessary or can be required; if that can be done, it should be done. However, what does he hope to accomplish by bargaining that is not already written in the law? It forbids payment of more than a reasonable charge, or the Title XVIII charge, and directs that such a "reasonable charge" be paid. Physicians want no more and deserve no less.

It would be proper and helpful for the state society to represent its members in challenging the department's position. But I do not want the society bargaining for me for service to my patients. I do not want it to put me in the position of an "employee" of the state. I do not want it to fix my charges. I do not want it to subject me to the control of a lay department of the state, as to the means and methods which I adopt in treating my patients. I do not intend to sign a participating agreement. If that means that I must forego the doubtful privileges of serving patients under Medicaid requisitions, I am prepared to make the sacrifice.

I have another objection to the participation procedure. It must mean that the state will undertake to prepare and distribute an "eligible list" of physicians, whose charges for services to Medicaid patients will be reimbursed, while the same amount claimed by equally qualified physicians who do not appear on the list will not be paid. This, I understand to be contrary to basic and fundamental principles of our society and we, as a society, should prevent it from happening.

Another and rather important objection to the physician's letter is this: He speaks of lawyers in a particular firm. I do not know them. We have consulting lawyers for both our state and county societies. We should, without looking further, be able to find somebody within this group competent to handle the matter for us in Detroit. However, as I have suggested above, I do not regard the problems raised by the doctor's letter as problems of labor relations.

Finally, I see no area in which the interests of the MD's and DO's are not the same with respect to Medicaid. I should think it would be in their common interest to work together in repelling this attack upon the private system by the state department.

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Publication of **Michigan Medicine** is under the direction of the Publication Committee, Michigan State Medical Society. The scientific editor is responsible for the scientific content. The managing editor is responsible for the production, correspondence and contents of the journal. He and the executive editor share final responsibility of the entire publication.

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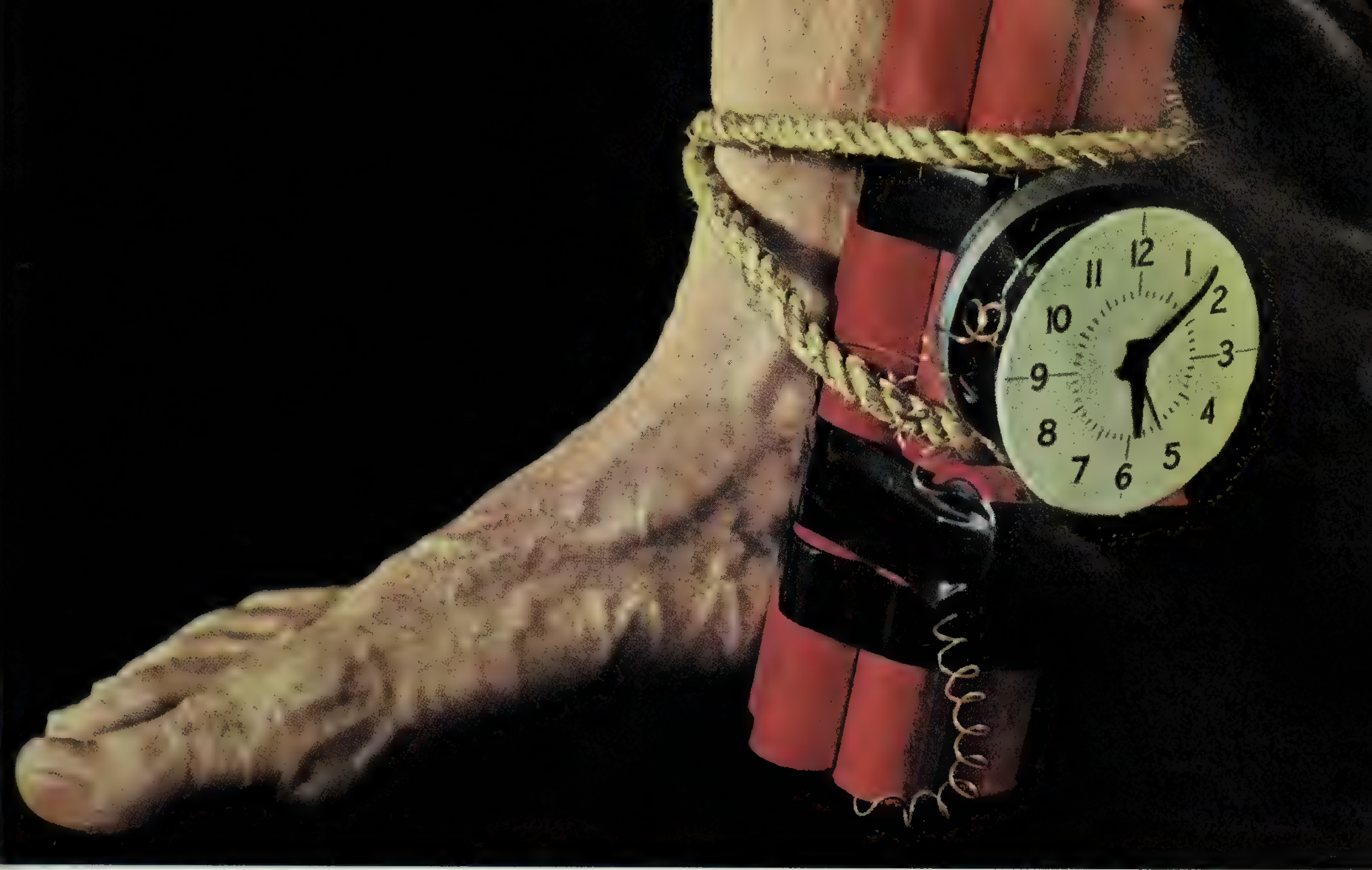

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tablets of 100 mg.

Important Note: This drug is not a simple analgesic. Do not administer casually. Carefully evaluate patients before starting treatment and keep them under close supervision. Obtain a detailed history, and complete physical and laboratory examination (complete hemogram, urinalysis, etc.) before prescribing and at frequent intervals thereafter. Carefully select patients, avoiding those responsive to routine measures, contraindicated patients or those who cannot be observed frequently. Warn patients not to exceed recommended dosage. Short-term relief of severe symptoms with the smallest possible dosage is the goal of therapy. Dosage should be taken with meals or a full glass of milk. Patients should discontinue the drug and report immediately any sign of: fever, sore throat, oral lesions (symptoms of blood dyscrasia); dyspepsia, epigastric pain, symptoms of anemia, black or tarry stools or other evidence of intestinal ulceration or hemorrhage, skin reactions, significant weight gain or edema. A one-week trial period is adequate. Discontinue in the absence of a favorable response. Restrict treatment periods to one week in patients over sixty.

Indications: Acute gouty arthritis, rheumatoid arthritis, rheumatoid spondylitis.

Contraindications: Children 14 years or less; senile patients; history or symptoms of G.I. inflammation or ulceration including severe, recurrent or persistent dyspepsia; history or presence of drug allergy; blood dyscrasias; renal, hepatic or cardiac dysfunction; hypertension; thyroid disease; systemic edema; stomatitis and salivary gland enlargement due to the drug; polymyalgia rheumatica and temporal arteritis; patients receiving other potent chemotherapeutic agents, or long-term anticoagulant therapy.

Warnings: Age, weight, dosage, duration of therapy, existence of concomitant diseases, and concurrent potent chemotherapy affect incidence of toxic reactions. Carefully instruct and observe the individual patient, especially the aging (forty years and over) who have increased susceptibility to the toxicity of the drug. Use lowest effective dosage. Weigh initially unpredictable benefits against potential risk of severe, even fatal, reactions. The disease condition itself is unaltered by the drug. Use with caution in first trimester of pregnancy and in nursing mothers. Drug may appear in cord blood and breast milk. Serious, even fatal, blood dyscrasias, including aplastic anemia, may occur suddenly despite regular hemograms, and may become manifest days or weeks after cessation of drug. Any significant change in total white count, relative decrease in granulocytes, appearance of immature forms, or fall in hematocrit should signal immediate cessation of therapy and complete hematologic investigation. Unexplained bleeding involving CNS, adrenals, and G.I. tract has occurred. The drug may potentiate action of insulin, sulfonylurea, and sulfonamide-type agents. Carefully observe patients taking these agents. Nontoxic and toxic goiters and myxedema have been reported (the drug reduces iodine uptake by the thyroid). Blurred vision can be a significant toxic symptom worthy of a complete ophthalmological examination. Swelling of ankles or face in patients under sixty may be prevented by reducing dosage. If edema occurs in patients over sixty, discontinue drug.

Precautions: The following should be accomplished at regular intervals: Careful detailed history for disease being treated and detection of earliest signs of adverse reactions; complete physical examination including check of patient's weight; complete weekly (especially for the aging) or an every two week blood check; pertinent laboratory studies. Caution patients about participating in activity requiring alertness and coordination, as driving a car, etc. Cases of leukemia have been reported in patients with a history of short- and long-term therapy. The majority of these patients were over forty. Remember that arthritic-type pains can be the presenting symptom of leukemia.

Adverse Reactions: This is a potent drug; its misuse can lead to serious results. Review detailed information before beginning therapy. Ulcerative esophagitis, acute and reactivated gastric and duodenal ulcer with perforation and hemorrhage, ulceration and perforation of large bowel, occult G.I. bleeding with anemia, gastritis, epigastric pain, hematemesis, dyspepsia, nausea, vomiting and diarrhea, abdominal distention, agranulocytosis, aplastic anemia, hemolytic anemia, anemia due to blood loss including occult G.I. bleeding, thrombocytopenia, pancytopenia, leukemia, leukopenia, bone marrow depression, sodium and chloride retention, water retention and edema, plasma dilution, respiratory alkalosis, metabolic acidosis, fatal and nonfatal hepatitis (cholestasis may or may not be prominent), petechiae, purpura without thrombocytopenia, toxic pruritus, erythema nodosum, erythema multiforme, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), exfoliative dermatitis, serum sickness, hypersensitivity angiitis (polyarteritis), anaphylactic shock, urticaria, arthralgia, fever, rashes (all allergic reactions require prompt and permanent withdrawal of the drug), proteinuria, hematuria, oliguria, anuria, renal failure with azotemia, glomerulonephritis, acute tubular necrosis, nephrotic syndrome, bilateral renal cortical necrosis, renal stones, ureteral obstruction with uric acid crystals due to uricosuric action of drug, impaired renal function, cardiac decompensation, hypertension, pericarditis, diffuse interstitial myocarditis with muscle necrosis, perivascular granulomata, aggravation of temporal arteritis in patients with polymyalgia rheumatica, optic neuritis, blurred vision, retinal hemorrhage, toxic amblyopia, retinal detachment, hearing loss, hyperglycemia, thyroid hyperplasia, toxic goiter association of hyperthyroidism and hypothyroidism (causal relationship not established), agitation, confusional states, lethargy; CNS reactions associated with overdosage, including convulsions, euphoria, psychosis, depression, headaches, hallucinations, giddiness, vertigo, coma, hyperventilation, insomnia; ulcerative stomatitis, salivary gland enlargement.
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Here are details of Annual Session scientific programs

Doctor, have you circled Oct. 3-5 on your calendar?

If not, do so now, and make plans to be in Detroit on those days for the 1972 MSMS Annual Scientific Sessions, the 107th offered by your state medical society.

Co-chairmen of the 1972 MSMS scientific sessions are Robert L. Tupper, MD, director, Michigan Association for Regional Medical Programs, and Richard D. Judge, MD, Ann Arbor, Department of Postgraduate Medical Education, The University of Michigan.

Each event is open to all registrants free of charge, with the exception of three postgraduate courses which require advance registration and payment of a $10 fee. Interns, residents, and students, may attend the PG courses free of charge, although they are asked to pre-register.

Morning scientific programs

The program begins each day with two concurrent scientific sessions from 9 a.m. to noon. On Wednesday, there will be a surgical scientific program, with topic yet to be announced, and a medical practical program, "The diagnosis and treatment of degenerative joint disease."

On Thursday, the morning offerings will be reversed, with a medical scientific program, "Perspectives in internal medicine," and a surgical practical program, "Psychological dilemmas of mutilating surgery."

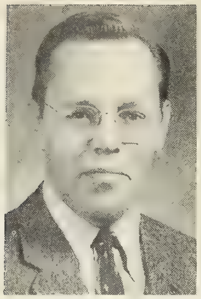
Concurrent luncheon sessions

Following the morning sessions will be concurrent luncheons. On Wednesday, the three topics are "Immunological deficiency diseases"; "Win a few, lose a few," arranged by industrial psychiatrists, and "Abnormalities in cyclic AMP metabolism in psoriasis."

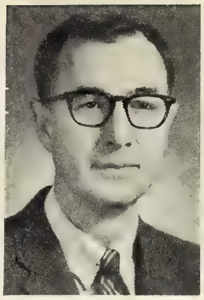
Thursday luncheon meetings will take up the topics of pathology, thoracic surgery and "The management and reconstruction aspects of the upper third of the face."

Afternoon meetings

During afternoons both days, specialty societies and MSMS sections are offering meetings which are open to all registrants.



Doctor
Tupper



Doctor
Judge

These include, on Wednesday, "The natural history and practical management of renal vascular hypertension," "Office diagnosis of gynecological malignancy and a current look at delivery room care," "Low back pain—a syndrome," "Sexual counseling and family counseling," "Immunology and diseases of the digestive tract," "Management of malignant disease of accessory nasal sinuses," "Aseptic necrosis in congenital dislocation of the hip," "Clinical consequences of environmental abuse," "Angiography in the pediatric age group," and "Aneurysmal bone cyst, menace or myth."

Thursday afternoon meeting topics are "Saphenous aorto-coronary bypass, prosthetic valve implantation, Braunwald-Cutter prosthesis, bacterial endocarditis, anterior mediastinotomy, trachea resection, acquired tracheal stenosis"; "Non-neoplastic diseases of the lung," "Immunizations—1972," "Multiple sclerosis: why? how? now? and when?" "Dyslexia," Anesthetic management of the patient with increased intracranial pressure," and "Drug abuse: Historical and neurophysiological aspects."

Postgraduate courses

Three postgraduate courses are scheduled on Wednesday and Thursday. "Fainting," and "Strategies in the diagnosis and management of patients with recurrent chest pain," are scheduled concurrently from 2 to 5 p.m. Wednesday, and "Surgical approaches to coronary disease" will be offered from 2 to 5 p.m. Thursday.

Special programs

On Tuesday afternoon preceding the scientific meetings on Wednesday and Thursday, three special programs are scheduled.

MD and DO chiefs and vice chiefs of staff, chiefs of clinical departments and MD and DO hospital administrators, as well as any other interested persons are invited to attend a 2 to 5 p.m. meeting Tuesday on the "Anatomy and physiology of a community hospital medical staff," in the English Room.

"Improved utilization and efficiency in the emergency department" will be the topic for members of the Michigan chapter, American College of Emergency Physicians, who plan a luncheon meeting Tuesday in the Sheraton Room.

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Ottawa County doctors renewing PR efforts with aggressive plans

By Judith Marr
Managing Editor

"It's time to change our image and to give the general public information that's helpful and of interest to them."

That's the spirit, described by Donald DeWitt, MD, Holland, under which the Ottawa County Medical Society is launching a renewed public relations effort. Their plans, to develop more public and physician awareness of mutual problems, can serve as a model for other county medical societies to follow.

Doctor DeWitt is chairman this year of the OCMS Public Relations Committee. Under his leadership, the committee plans to develop live and taped local radio programs, physician-authored articles for the newspapers, and a series of public forums.

The forums most likely will deal with common medical problems such as VD, drug and alcohol abuse, cancer, diabetes, stroke, arthritis and heart disease. The radio programs and articles will discuss diseases and will delve, too, into the cost problems of medical care and the politics of medicine, Doctor DeWitt predicts.

"We want to give the general public an insight into the problems facing doctors in their practices today as they affect patient care," he says.

"We're not going to be overwhelming in six months," admits Doctor DeWitt. "We hope our efforts continue to grow over the years.

"We're planning for the future, really," he says, and he's not blind to the significance of better communications in this national election year when "doctors and medicine are in the limelight."

The OCMS kicked off its PR renewal with a dinner meeting early this summer in Holland, when frank discussion prevailed between OCMS members and representatives of local Chambers of Commerce and news media.

Similar PR efforts were begun several years ago, according to Doctor DeWitt, but now need rejuvenating. "There seems to be renewed interest now and the OCMS is allotting money toward our public relations work," he explains.

The recent OCMS meeting produced photos and articles in both the Grand Haven *Daily Tribune* and the Holland *Evening Sentinel*, with the *Daily Tribune* expressing its obvious good feelings following the meeting: "Doctors generally are more concerned about public relations than ever before and are eager to reach more persons in communities with health information, Doctor DeWitt explained. The Grand Haven *Tribune* has long been cooperative with the society in presenting the news and is eager for more of it from the doctors and hospitals."

Specifically, the OCMS plans to reactivate its highly-successful series of forums, which in the past united fathers and their grade school sons, and mothers and their grade school daughters for sex education presentations and also presented discussions of diseases before 1,500 interested townspeople at a time. As in the past, the public will be invited to submit written questions to the panelists.

Doctor DeWitt's committee hopes to have three or four forums each year, with the first, on VD, planned simultaneously in Holland and Grand Haven in Sepember.

A second pair of forums on drug and alcohol abuse are scheduled by the OCMS in January, for which the committee hopes to attract an out-of-state authority.

The OCMS public relations committee will begin its first radio programs, planned as five-minute interviews, 15-minute presentations and half-hour panel discussions with audience participation, in September.

Local physicians will tape the radio programs, and "we plan to involve the whole medical community," says Doctor DeWitt. One of the first topics to be discussed on the air will be the hidden costs of medical care.

The tapes will be aired on three stations, hopefully once a week on each station. "The stations are cooperative," Doctor DeWitt comments.

In fact, the media "all are attuned to us and helpful in our efforts to give the public a chance to know what physicians are doing and what our plans are," says Doctor DeWitt. "It's a job that's got to be done."

An additional public relations activity planned by the OCMS is a meeting in September featuring a well-known sports personality and an awards dinner for all county physicians, active and retired, who have served as high school and college physicians during the past 25 years.

Members of the Ottawa County Medical Society Public Relations Committee are, from left, Robert Weeldryer, MD; Paul Dykema, MD, and Donald DeWitt, MD, chairman, all of Holland, and Gary M. Robertson, MD, Grand Haven.

Michigan mediscene

AUG. 25-26—Physician-Education Program, Michigan Heart Association Stroke Council, Schuss Mountain, Mancelona, contact: Harold Arnow, Director of Public Relations, MHA, 16310 W. Twelve Mile Road, PO Box LV-160, Southfield, 48076.

SEPT. 14—Second Annual Research Forum, Michigan Heart Association, at Michigan State University, contact: Harold Arnow, Director of Public Relations, Michigan Heart Association, 16310 W. Twelve Mile Road, PO Box LV-160, Southfield, 48076

SEPT. 16-17—Leadership Training Seminar, State of Michigan Medical Assistants, Hospitality Inn, Lansing, contact: Dorothy Brandis, 401 W. Greenlawn, Lansing, 48910

SEPT. 20—Council of Specialty Societies, 2 p.m., MSMS Headquarters, contact: Glenn E. Moore, MD, chairman, 323 W. Second, Flint, 48503

SEPT. 21-24—Michigan Regional Meeting, American College of Physicians and Michigan Society of Internal Medicine, Otsego Ski Club, Gaylord, contact: Muir Clapper, MD, ACP governor for Michigan, Wayne State University School of Medicine, 540 E. Canfield, Detroit, 48201

OCT. 1 and 4—The Council, Sheraton-Cadillac Hotel, Detroit, contact: Warren F. Tryloff, MSMS director

OCT. 1-5—107th Annual Session of the Michigan State Medical Society, Sheraton-Cadillac Hotel, Detroit, contact: Helen Schulte, MSMS headquarters, for scientific meeting information, and Richard Campau, MSMS headquarters, for House of Delegates information

OCT. 5—Annual Meeting, Michigan Division, American Cancer Society, Olds Plaza Hotel, Lansing, contact: Arthur L. Crampton, executive vice president, 1205 E. Saginaw St., Lansing, 48906

NOV. 8—The Council, special meeting, noon, MSMS headquarters, contact: Warren F. Tryloff, MSMS director

NOV. 9-10—MSMS Conference on the Physician and Environmental Quality Control, Hilton Inn, Detroit Metropolitan Airport, contact: Helen Schulte, MSMS headquarters

DEC. 6—The Council, MSMS Headquarters, contact: Warren F. Tryloff, MSMS director

FEB. 26-MARCH 2—Clinical gastroenterology, postgraduate course sponsored by the American College of Physicians, Towsley Center, University of Michigan Medical Center, Ann Arbor, contact: H. M. Pollard, MD, 2012 Vinewood Blvd, Ann Arbor, 48104

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This article is the second in a series by Michigan Blue Cross to assist physicians in their relationships with Blue Cross subscriber patients. This article explains, from Blue Cross' point of view, the criteria used to administer the certificate exclusion in diagnostic evaluation-type admissions.

"This is perhaps the most controversial area we encounter," says author Burns, "perhaps because it is the least understood."

Here is explanation of Blue Cross criteria to judge diagnostic and evaluation admissions

By Russell J. Burns
Physician Liaison
Michigan Blue Cross

An acute hospital bed occupied by an ambulant patient undergoing diagnostic maneuvers, which could have been safely and satisfactorily accomplished on an outpatient basis, is not the prime function of that acute bed. It is generally agreed that this position is not in conflict with good medical practice nor with proper hospital utilization.

Over the years, Blue Cross in-hospital benefits have been developed and expanded to provide a comprehensive range of coverage predicated upon *medically necessary* hospital admissions. The diagnostic and/or evaluation type admission, except under specified conditions, is not considered to be *medically necessary* and is, therefore, not a benefit under the Blue Cross contracts. Most problems concerning admissions arise in determining whether an admission primarily for diagnostic services was required or whether the diagnostic and therapeutic maneuvers performed could have been safely and satisfactorily accomplished on an outpatient basis. In many instances, patients are hospitalized because an outpatient work-up is less convenient, or because of the patient's insistence that it be done on an inpatient basis. Neither of these reasons constitute medical necessity, and such admissions are not covered. Since this type of admission is not a contract benefit, the Blue Cross subscriber has not been charged in his subscription rate for coverage of such admissions.

In Section VI, B-4 of the Blue Cross certificate, the following can be found: "Hospital service is not available hereunder when the care received by the member in the hospital consists principally of observation or diagnostic evaluation, or physical therapy, or X-ray examinations, laboratory examinations, electrocardiography, or basal metabolism tests, or reduction of weight by diet control."

This section is often referred to as the diagnostic admission or evaluation clause and is, on occasion, misunderstood by both physicians and patients. This exclusion is sometimes interpreted by physicians as referring only to "check-ups" or routine physical examinations. While these are excluded, hospitalization is also considered to be a diagnostic admission and ineligible for benefit coverage where the facts indicate that the admission was *principally* for the performance of various X-ray, laboratory or other special studies or consultation, or for convenience in diagnosing or evaluating a medical condition. Similarly, admissions to check the progress of therapy, or for environmental control without other definitive treatment, are excluded.

In excluding diagnostic admissions from benefit coverage, Blue Cross is in no sense implying that the tests or studies are not necessary. Its concern is, *was the hospital admission necessary?* Only the physician can or should say what studies are indicated in a given situation. The intent of the certificate is to provide hospital coverage of services for those with a definite illness or disability that cannot be cared for in the patient's home, physician's office or other ambulatory setting.

The certificate criteria are—*must this patient be hospitalized for these particular studies; are the studies of such a nature as to require hospitalization for their safe and effective performance; was the patient actually sick enough to require hospitalization apart from the studies performed; or was specific or definitive therapy also accomplished which reasonably required hospitalization.*

If the admission does not meet these criteria, then it must be denied for benefits. If the admission meets the criteria, the supporting medical facts and rationale would be expected to be found in the patient's medical record.

Under the terms of the certificate, hospital services are not available for the convenience of the patient or his physician, for the saving of time, travel or expense to the patient in the performance of X-ray examinations, laboratory studies, electrocardiography, basal metabolism tests, or physical therapy, or for check-up examinations when the person is not truly sick and in need of hospitalization.

Some physicians prefer, and some radiologists require as a matter of routine, that patients undergoing studies of the gastrointestinal tract be admitted to the hospital for convenience and more adequate preparation. Since such studies are commonly done on an ambulant basis, Blue Cross does not accept such admissions for benefits under the certificate. If, however, there are serious complicating medical factors, as with an elderly debilitated patient, the admission would be acceptable for benefits.

Declarations that a diagnosis had already been established and that the patient was admitted to perform studies to verify the diagnosis preparatory to outlining a treatment program, or evaluating progress of a disease, are not accepted as justification for Blue Cross coverage of the admission, unless the patient is actually ill and in need of hospitalization, or the studies could not be properly and safely performed on an ambulant outpatient basis.

Because the ability of children to express themselves in describing symptomatology and in cooperating in the performance of some tests is less than that of adults, Blue Cross has been more liberal in accepting responsibility for the hospitalization of infants and children for diagnostic study and observation.

While special diets as a part of the total medical care of the patient are a Blue Cross benefit, admissions principally for the purpose of weight reduction by diet control, with or without adjunctive measures (such as appetite suppressant drugs, vitamin supplements, etc.), are excluded from Blue Cross coverage. Failure to lose weight while under the care of a physician on an outpatient or office basis is not considered justification for Blue Cross hospital benefits.

Physical therapy is a covered service for inpatients when the physical therapy treatment is not the principal mode of therapy, but represents part of a total treatment or rehabilitation program for a medical condition in patients having a reasonable potential for recovery or improvement. Rehabilitative hospital services, of which physical therapy may be a part, are covered on an inpatient basis when they are of such complexity and diversity that they cannot appropriately be furnished in a less intensive setting, or cannot feasibly be performed on an outpatient basis. Convenience or socio-economic factors, such as lack of transportation from the patient's home to the hospital, are not considered justification for inpatient admission benefits for physical therapy.

In an effort to be as fair as possible to all concerned, in arriving at a coverage decision on admissions which appear to fall into the above categories, Blue Cross will often refer these cases back to the utilization review committee at the hospital of origin. The information which has been secured regarding the admission is summarized, the area of concern is noted and the utilization review committee is asked to assess the admission against the criteria and render an opinion. We believe that such coverage decisions should be made by or with the assistance of physicians and Blue Cross very much appreciates the cooperation it has, and is, receiving from utilization review committees through the State.

Bibliography

"Medical Review Committee Guide," Michigan Blue Cross

"Guidelines for Medical Claims," Blue Cross of Atlanta, Ga.

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MDPH has new schedule for gonorrhea treatment

The Michigan Department of Public Health has launched a new venereal disease control effort in the 16 Michigan counties with the highest incidence of gonorrhea. The MDPH also has announced a new recommended treatment schedule for gonorrhea.

Counties involved in the new program are Wayne, Ingham, Kalamazoo, Muskegon, Genesee, Kent, Saginaw, Calhoun, Washtenaw, Berrien, Oakland, St. Clair, Ottawa, Bay, Jackson and Macomb.

Tom G. Ortiz, chief of the MDPH's venereal disease control section, is assembling staff in the 16 counties under funding provided by a federal grant.

In what Ortiz calls "an aggressive program," the additional staff will interview males treated for gonorrhea to identify contacts who also may be infected. In addition, staff members will work with private physicians to encourage testing of women patients for asymptomatic gonorrhea.

Free laboratory service, including pick-up and delivery of cultures and supplies with rapid reporting service, is being made available in the 16 target counties. In these counties, Thayer-Martin Medium is being used. In counties with lower gonorrhea incidence, physicians are being encouraged to participate by using the state department's diagnostic service conducted by mail, which uses Transgrow Medium.

Following is the new recommended treatment schedule for gonorrhea, developed by the United States Public Health Service and adopted by MDPH in March:

Michigan Department of Public Health

Division of Disease Control

Gonorrhea

Recommended Treatment Schedules

For *Neisseria gonorrhoeae* infection the preferred drug is penicillin or ampicillin. Physicians are cautioned to use no less than the recommended doses of antibiotics.

For Treatment of Uncomplicated Gonorrhea (Urethral, Cervical, Pharyngeal, or Rectal)

Parenteral—Men or Women—Aqueous procaine penicillin G, 4.8 million units intramuscularly divided into at least two doses and injected at different sites at one visit, together with 1 gram of oral probenecid, preferably given at least 30 minutes prior to the injection.

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or

Oral—Men or Women—Ampicillin, 3.5 grams, with probenecid, 1 gram, administered simultaneously.

Treatment of contacts: Patients with known exposure to gonorrhea should receive the same treatment as those known to have gonorrhea.

When Penicillin or Ampicillin is Contraindicated,* or When the Above Schedules Are Ineffective

Parenteral—
Men—Spectinomycin, 2 grams, in one intramuscular injection.

Women—Spectinomycin, 4 grams, in one intramuscular injection.

or

Oral—Men or Women—Tetracycline HCl, 1.5 grams initially, followed by 0.5 gram four times a day for 4 days, a total dosage of 9 grams. Other tetracyclines are not more effective.

Follow-Up

Follow-up urethral cultures should be obtained from males 7 days after completion of treatment; cervical and rectal cultures should be obtained from females at 7 - 14 days after completion of treatment.

Complications

Although treatment of complications (gonococcal salpingitis, bacteremia, arthritis, etc.) must be individualized, repeated large parenteral doses of aqueous crystalline penicillin G have been shown to be effective. The efficacy of alternate antibiotic regimens is unproven. Post-gonococcal urethritis can be treated with tetracycline, 0.5 gram, orally four times a day for at least 7 days.

Syphilis

All gonorrhea patients should have a serologic test for syphilis at the time of diagnosis. Patients receiving the recommended parenteral penicillin schedule need not have follow-up serologic tests for syphilis. Patients treated with ampicillin, spectinomycin, or tetracycline should have a follow-up serologic test for syphilis each month for 4 months to detect syphilis that may have been masked by treatment for gonorrhea.

Patients with gonorrhea who also have syphilis should be given additional treatment appropriate to the stage of syphilis.

While long-acting forms of penicillin (such as benzathine penicillin G) are effective in syphilotherapy, they have *NO* place in the treatment of gonorrhea.

---

*Allergy to penicillin, ampicillin, probenecid, or previous anaphylactic reaction.

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In small doses

Joseph C. Denniston, MD, Caro,
is new deputy director of the Michigan Department of Mental Health, appointed by Director E. Gordon Yudashkin, MD, to represent the state in all matters pertaining to area mental health services. Doctor Denniston will be responsible for development of comprehensive services for mentally retarded and mentally ill in the metropolitan region as of June 1. He has been medical superintendent of the Caro State Home and Training School for the past two years.

Merle Dykema, MD, Grand Rapids,
Butterworth Hospital resident, won grand prize for his paper, "Cardiopulmonary Resuscitation in a Community Hospital," at the Fifth Annual Meeting of the Western Michigan Research Club recently.

Leon Fill, MD, Detroit,
is recipient of the Distinguished Service Award of Yeshiva University for his efforts toward the advancement of higher education and his civic and humanitarian services. Doctor Fill was honored at the 17th annual dinner of the Detroit Friends of Yeshiva University June 28. He is former vice president of the Michigan State Board of Education and received the MSMS Centennial Award. He is chief of ob/gyn at Plymouth General and Doctors hospitals.

D. Bonta Hiscoe, MD, Lansing,
is a 1972 recipient of the Key Award for Meritorius Service, the highest honor of the Michigan Hospital Association. The award was made at the MHA's annual convention late in June at Mackinac Island. Doctor Hiscoe was cited for "his dedication to the orderly growth of health care facilities and . . . for his recognized understanding of the ever-changing role of the multi-service facility in modern society. . ." He has served as president of the Health Planning Council of Michigan.

John R. Wilson, MD, Grand Rapids,
is a new appointee to the board of trustees of Butterworth Hospital. Former chairman of the MSMS Section on Pediatrics and past president of the Kent County Medical Society, he is also past president of the Butterworth Medical Staff.

Floyd C. Stevens, Jr., MD, Auburn,
is Outstanding Citizen of his community, so named during Michigan Week festivities in the Midland-area city. Doctor Stevens was presented with a plaque for his outstanding service to the community as doctor and friend.

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– George Sarton, from "The History of Medicine Versus the History of Art"

Would it be useful in clinical practice to have government predetermine drugs of choice?

Opinion

Results of a survey of physicians:

13.3%
Yes, it would be useful.

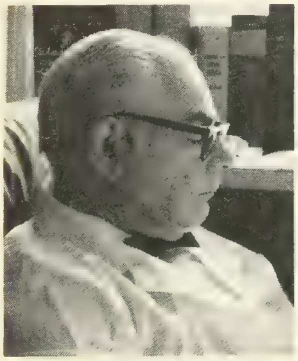
86.7%
No, it would not be useful.

Dialogue

Would it be useful in clinical practice to have government predetermine drugs of choice?

Doctor of Medicine

Walter Modell, M.D.,
Professor of Pharmacology,
Cornell University
Medical College,
Editor,
Clinical Pharmacology
& Therapeutics,
Drugs of Choice,
Rational Drug Therapy



The proposition that government should determine one or two "drugs of choice" within a given therapeutic class reflects the belief that a similarity in molecular structure insures a close similarity in pharmacologic effect. But this is by no means the rule. An obvious example would be in the field of diuretics, where a small change in chemical structure accounts for substantial differences in concomitant effects such as potassium excretion.

Any attempt to dictate the "drug of choice" would be complicated by the fact that some populations demonstrate a bimodal distribution in their reaction to drugs. If the data on drug response are mixed for the total population, one drug will appear to be as useful as the other. But if drug response is reported separately for different segments of the population, drug A will be found to be better for one group and drug B for the other.

It may, of course, be possible to determine drugs of choice in particular categories on a broad statistical basis. But there are always certain patients in whom a drug produces odd, unpredictable or idiosyncratic reactions. So, though a drug might statistically be the most useful one in a given situation, individual variations in response might make it the *incorrect* one.

The point I wish to make is that if two, three, four or more drugs in one class are of approximately equal merit, that in itself is justification for their availability. Exceptional cases do arise in which one drug would be useful to a certain segment of the population and another drug would be of no use at all. In the practice of medicine, the physician must be prepared to treat the routine as well as the unusual case.

Another objection to the determination of a drug of choice is that precise statements of *relative* efficacy are very difficult to make—much more difficult than statements of efficacy. For example, in testing drug efficacy, it is easy to determine the difference between a drug that is effective in treating a condition and one that is not at all effective. Thus, it is fairly easy to determine whether a drug is more effective than a placebo. But if you compare one drug that is effective with another drug that is also effective, and the relative differences between them are very slight, statements of relative efficacy may be very difficult to make with assurance.

I do not mean to imply that relative efficacy statements are not useful or can never be made. With some groups of drugs (e.g., analgesics), extensive study and precise methodology have yielded useful information on relative efficacy. But in most situations, such information can be acquired only through studies encompassing three to five years of use in many more patients than are used to compare drugs with a placebo for the introduction of a drug into commerce. It is really only after practitioners use a drug extensively that relative safety and efficacy
in practice can really b
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areas of medical practice.

Maker of Medicine

enneth G. Kohlstaedt, M.D.,
Vice President,
Medical Research,
Eli Lilly and Company

In my opinion, it is not e function of any govern- ent or private regulatory ency to designate a "drug choice." This determina- on should be made by the ysician after he has re- ived full information on e properties of a drug, d then it will be based on s experience with this ug and his knowledge of e individual patient who seeking treatment.

If an evaluation of com- rative efficacy were to be ade, particularly by gov- nment, at the time a new ug is being approved for arketing, it would be a eat disservice to medi- ne and thus to the patient he consumer. For exam- e, when a new therapeu- agent is introduced, on e basis of limited knowl- ge, it may be considered be more potent, more fective, or safer than oducts already on the arket. Conceivably, at is time the new drug uld be labeled "the drug choice." But as addi- nal clinical experience is cumulated, new evidence ay become available. ter, it may be apparent that the established products should not be so easily dismissed.

Variation in patient response to drugs constitutes one of the major obstacles to the determination of "drugs of choice." We are just beginning to open the door on pharmacogenetics, but it is evident that genetic differences cause wide variations in the way drugs are absorbed, metabolized, etc. This fact alone is sufficient to make unrealistic the idea that there is one drug in each class to be used for every human being.

The problem of determining relative drug efficacy is an extremely complicated one. Comparison with other drugs of the same class should not be a prerequisite for marketing a new substance. In some therapeutic areas, it may be difficult to make accurate comparisons. For example, in the treatment of infections it is not possible to conduct crossover studies. Recovery may be influenced by factors which cannot be controlled or measured, i.e., natural host resistance and virulence of infective agents. A drug's acceptability must often be judged on the basis of its own performance, and this may be limited to experience in a relatively small patient population. If the introduction of a new drug must await the adequate establishment of relative efficacy, the duration of clinical trial and extent of studies would be greatly prolonged, particularly for rare or unusual conditions. The availability of a new drug would be delayed. Many patients might suffer needlessly and lives might be lost.

Relative efficacy can best be established by experience in a general patient population through regular channels of clinical practice. The physician considers the patient as a whole, which means the patient often has multiple problems and drugs must be selected with this in mind. Hence, a "drug of choice" in an uncomplicated case may not be the best drug for a patient with associated problems. Publication of well-controlled studies in medical journals may provide comparative evidence; discussions at medical meetings, presentations at postgraduate courses, and the new audio-visual technology may bring evidence to physicians on comparative therapy. In a free medical marketplace, a drug that does not measure up will fall into disuse. For example, broad clinical experience has established vitamin B_{12} as the "drug of choice" for the treatment of primary pernicious anemia. No amount of advertising or promotional effort by the manufacturer could increase the use of liver extract for this anemia. However, a physician may wish to employ parenteral liver preparations for a special purpose.

In the field of surgery, peer review in the hospital has brought significant improvement in the use of new techniques and procedures. Something of this nature would be useful in the area of drug therapy. However, it should be developed by the medical profession itself and would necessitate, for its proper function, an improvement in the dissemination of reliable data on clinical pharmacology of drugs under consideration.

Ideally, information on the relative efficacy of drugs should be gathered and assessed by the physicians who actually administer the specific agents to a specific patient population. To do this, they will need even more information on the drugs they use – information that the pharmaceutical manufacturers must begin to provide if government regulation of *"drugs of choice"* is to be avoided.

Opinion & Dialogue

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Retrograde cholangiography

By John P. Papp, MD, FACP
Grand Rapids

Abstract

Retrograde Cholangiography was performed in a patient with jaundice occurring post cholecystectomy. Because of the finding of a normal common duct, scheduled surgery was canceled and the patient was managed medically.

Retrograde cholangiography is a new and exciting diagnostic tool for the gastroenterologist. Its use in the jaundiced patient to differentiate between intra and extrahepatic obstruction when the diagnosis is not clear will decrease the need for diagnostic laparotomy. This report describes the usefulness of retrograde cholangiography in obviating unnecessary surgery in a patient with increasing jaundice postcholecystectomy.

Case Report

A 24-year-old white male experienced progressively severe midepigastric discomfort for three days prior to admission. On the day of admission, the discomfort radiated to the right upper quadrant.

On physical examination, the temperature was 101.8°F. The blood pressure was 120 systolic and 68 diastolic. The abdomen was rigid. Bowel sounds were hypoactive.

The hemoglobin was 15.4 g/100ml; hematocrit 45 per cent; the white cell count 15,700 with 65 per cent neutrophils, 22 per cent band forms, and 13 per cent monocytes. The amylase was 81 Somogyi units, the total bilirubin 3.2 mg/100ml with 1.3 mg/100ml direct; the serum glutamic oxaloacetic and pyruvic transaminase 19 and 22 sigma units, respectively; and the alkaline phosphotase 1.6 Bodansky units.

Celiotomy revealed acute cholecystitis and cholelithiasis. No investigation of the common bile duct was undertaken because of marked inflammation and edema in the area. Histologic interpretation was acute gangrenous cholecystitis with multiple small calculi.

Postoperatively the total bilirubin rose to 16mg/100ml. On the tenth postoperative day, duodenoscopy with the Olympus JF duodenoscope was performed with cannulation of the papilla of Vater. It appeared edematous and erythema of the os was noted. Injection of Renografin revealed a normal appearing biliary tree and a cystic duct remnant (**Figures 1-2**).

Discussion

Cannulation of the papilla of Vater requires experience and the availability of an endoscope providing good visualization and flexibility. It has become routine to visualize the papilla of Vater with the JF and GIF Olympus endoscopes. Several recent reports have described cannulation without adverse effects.[1,7]

The report herein describes the practical use of cannulation of the papilla of Vater and performing retrograde cholangiography. It is felt that the patient's jaundice was due to edema of the common duct and papilla of Vater secondary to cholecystitis and not to common duct stones. Jaundice rapidly cleared post cannulation.

It is hoped this technique will replace transhepatic cholangiography in most instances; for its numerous hazards are well known. It should also lessen the need for laparotomy in the integrated approach to diagnosis of hepato-biliary tree disease as recently advocated by Strack et al.[8]

Bibliography

1. Rabinov LR, Simon M: Peroral cannulation of the ampulla of Vater for direct cholangiography and pancreatography; preliminary report of a new method. *Radiology* 85:693-697, 1965.
2. McCune WS, Shorb PE, Moscovitz H: Endo-

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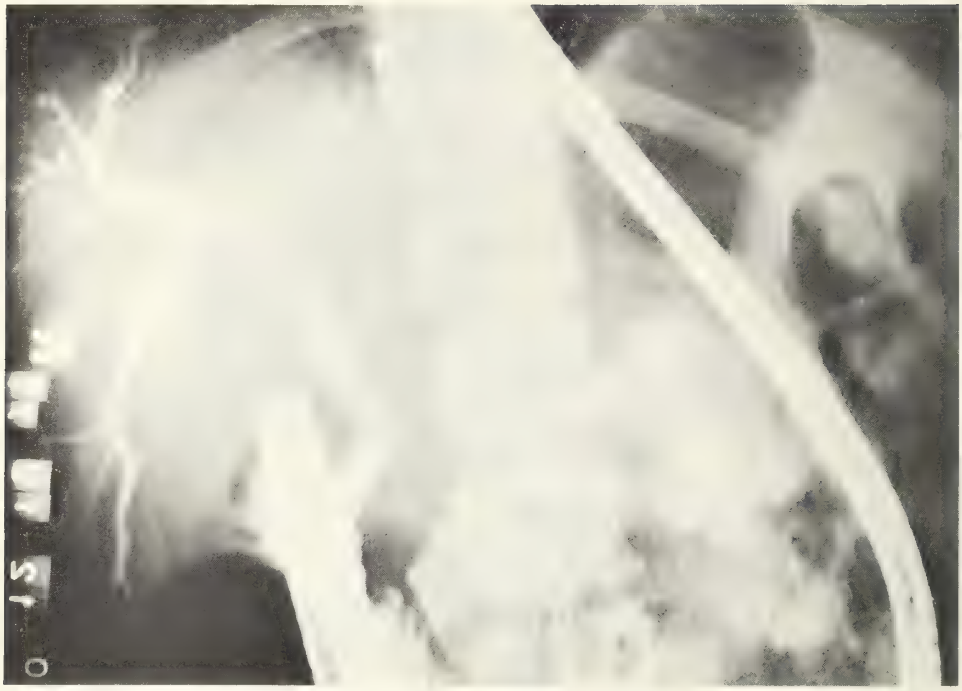

Figure 1. A normal appearing biliary tree and cystic duct remnant demonstrated by retrograde cholangiography.

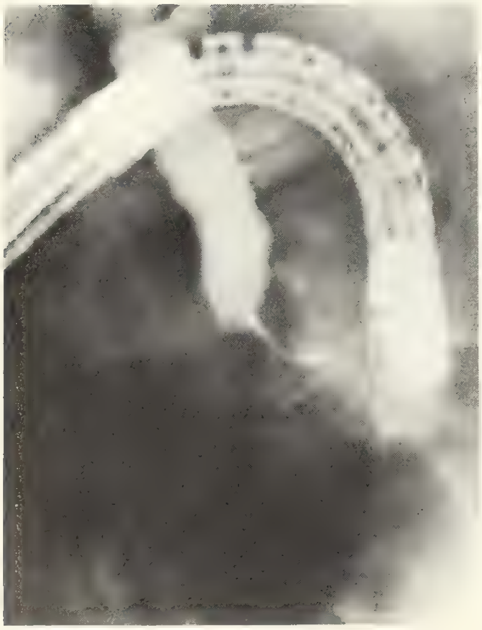

Figure 2. Demonstration of the cannula in the papilla of Vater with contrast material filling the common bile duct.

scopic cannulation of the ampulla of Vater; a preliminary report. *Ann Surg* 167:752-756, 1968.

3. Takagi K, Ikeda S, Nakagawa Y, et al: Retrograde pancreatography and cholangiography by fiber duodenoscope. *Gastroenterology* 59:445-452, 1970.
4. Oi I: Endoscopic pancreatography by fiberduodenoscope (FDS-Lb). *Jap J Gastroent* (Tokyo) 66:880-883, 1969.
5. Salmon PR, Brown P, Htut T, et al: Duodenoscopy. *Lancet* 1:1298-1299, 1971.
6. Oi I: Fiberduodenoscopy and endoscopic pancreatocholangiography. *Gastrointestinal Endoscopy* 17:59-62, 1970.
7. Cotton PB, Blumgart LH, Davies GT, et al: Cannulation of papilla of Vater via fiber-duodenoscope; assessment of retrograde cholangiopancreatography in 60 patients. *Lancet* 1:53-58, 1972.
8. Strack PR, Newman HK, Lerner AG, et al: An integrated procedure for the rapid diagnosis of biliary obstruction, portal hypertension and liver disease of uncertain etiology. *New Eng J Med* 285:1225-1231, 1971.

Diagnosis and treatment of metabolic acidemia in the infant with cyanotic congenital cardiovascular anomalies

By Gordon M. Folger, Jr., MD
Detroit

The newborn and young infant with hypoxemia of any cause presents to the physician a unique situation which for its often initially benign appearance is almost invariably life-threatening and should be considered an emergency of the highest order. This condition as it pertains to the infant with cyanotic forms of congenital cardiac malformations, forms the subject of this report, the principal purpose of which is to emphasize the importance of recognizing and treating the metabolic acidemia which is secondary to the condition and is usually found accompanying it.

As introduction, it is readily apparent that any infant eliciting true or "central" cyanosis is hypoxemic, the generally accepted criteria being that five grams or more of reduced hemoglobin be present. However, certain infants may appear cyanotic and yet not be hypoxemic, the cyanosis being secondary to such states as peripheral chilling or polycythemia of the newborn, which may be differentiated from hypoxemia simply,[1] often by observation of the depth of cyanosis while the infant is breathing 100% oxygen contrasted with the condition while breathing room air and which obviously must be excluded. Once the true nature of the condition is established, however, regulatory measures must be instituted.

In utero, the fetus is known to be hypoxemic, the accepted range of arterial oxygen saturation being 36-53%[2,3] with the pH ranging between 7.22 and 7.37. It is to be emphasized that this is extreme hypoxemia when compared to those values found normally following birth and is due almost totally to two mechanisms: (1) the inability of the placenta to fully saturate the blood and return it thus to the fetus and (2) the fetal circulation itself which differs from that following birth by not passing all of each cardiac stroke volume through the oxygenating organ (placenta). This hypoxemia, however, is perfectly tolerated by the developing fetus with little or no evidence of tissue hypoxia present unless an untoward intrauterine event supervenes to alter oxygenation of the blood or the circulation itself.

Hypoxemia following birth, in contrast, is always to be considered abnormal. Indeed, briefly stated, if full saturation of the blood is not present, a pathologic condition exists in all instances with the possible exception of the hypoxemic state occurring immediately adjacent to birth which is transient and self limited.[4]

Furthermore, once removed from the placental circulation and the intrauterine environment, the infant is totally dependent upon his own metabolic and excretory systems to maintain acid-base homeostasis. Should hypoxemia now supervene on the basis of respiratory or circulatory dysfunction or malformation, metabolism at a tissue level would become to varying degrees anaerobic. When this point is reached, tissue hypoxia exists and pyruvate which usually enters into several necessary metabolic reactions among which participation in the formation of acetylcoenzyme A is uppermost, instead becomes incorporated to an extent dependent on the degree of hypoxia, into the anaerobic carboxylic acid cycle and converted to lactic acid. It has been shown by Huckabee[5] that disturbance in the relationship of lactic to pyruvic acid resulting in a lactate excess corresponds closely to the magnitude of tissue oxygen debt. It is important to note that lactic acid is the end product of the anaerobic glycolytic pathway and can undergo no further metabolic change as is seen in the equation: $\text{pyruvate} + \text{DPNH} \rightleftharpoons \text{lactate} + \text{DPN}$. Reconversion to pyruvate, which can then under aerobic conditions enter the Krebs citric acid cycle, is the only effective method of reducing lactate levels and this can occur only in the presence of satisfactory systemic oxygen saturations. It thus becomes apparent that the cyanotic infant must be treated by combating the ever present metabolic acidemia and by taking measures to improve systemic arterial oxygenation.

Subjects and methods

Thirty-three infants having various forms of cyanotic congenital heart disease have been

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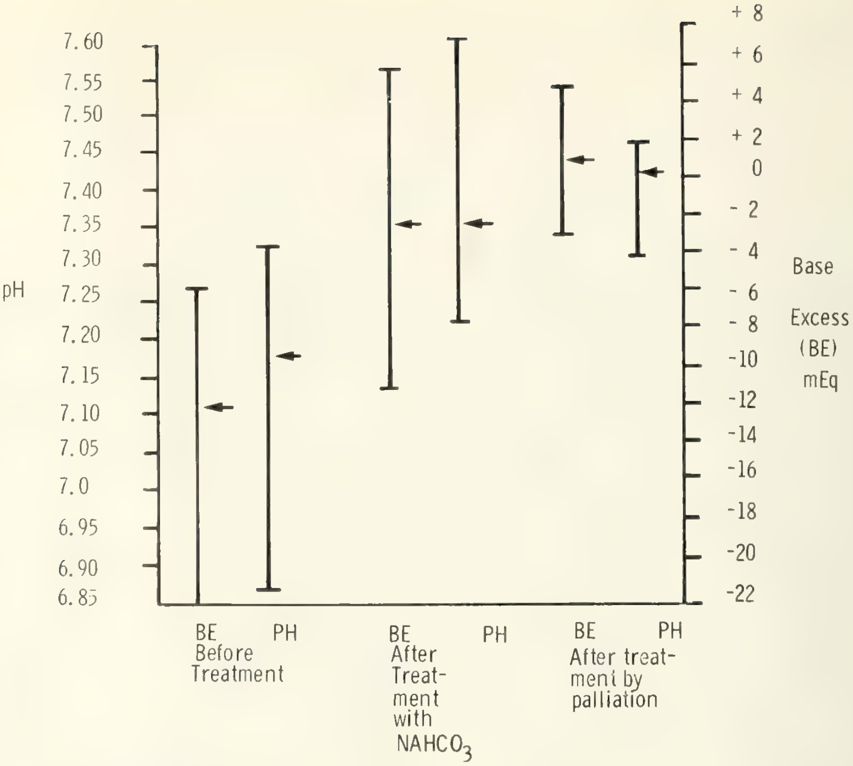

Figure 1: Acid-base findings before and after medical management and following successful palliation. All patients are represented in the before and after $NaHCO_3$ treatment groups. However, the group after successful palliation represents only six of nine patients successfully palliated and having data sufficient for analysis. Vertical bars represent ranges of values, arrows indicate mean values.

studied. The patients ranged in age from four hours to 62 days with an average of 15 days; their weights ranged from 1,500 grams to 5,480 grams, averaging 2,987 grams.

All infants were admitted to an intensive nursery care unit and at all times were maintained in a normothermic state. Hypothermic levels of temperatures were avoided throughout the hospital stay. Blood gases were monitored with an Astrup AME 1 (Radiometer, Copenhagen) using either arterial blood collected via an umbilical arterial catheter or directly during cardiac catheterization, or by using arterialized capillary blood collected by deep subcutaneous puncture of the heel. All infants underwent at least one cardiac catheterization with complete study of the right heart and in all instances at least partial study of the left heart. Additionally, all infants had multiple angiographic evaluation from the pertinent cardiac chambers or vessels. Balloon atrial septostomy was performed when applicable at the time of diagnostic catheterization.

Determination of the blood gases was carried out at varying intervals depending on several factors: (1) the degree of previous alterations; (2) severity of the suspected alterations (3) previous treatment; (4) clinical condition. Monitoring was, in general, at periods of 1 to 4 hours by the method Astrup[6,7] and treatment consisted of the infusion of sodium bicarbonate or occasionally that of THAM-E. Determination of the amount of sodium bicarbonate required was by the formula of Astrup,[7] the calculation being: weight in kg. x base excess x 0.3 = mEq $NaHCO_3$ required to restore the acid-base defect to physiologically acceptable levels. Thus we have used as minimal criteria for acceptability pH at least 7.30 and base excess no lower than -6. Palliative cardiovascular surgery to increase systemic oxygenation by any of several techniques, depending on the anatomic malformation, was employed whenever indicated.

Results

Of the 33 infants, 20 have succumbed to their illness, 12 because of their defects and without benefit of surgery and eight as a result of unsuccessful palliative surgical procedures. Eleven of these infants in whom no surgery was attempted were known to have aortic or mitral atresia or both with intact ventricular septum, the hypoplastic left heart syndrome[8] which at present is not considered amenable to any surgical procedure and presents a mortality approximating 100% in the immediate neonatal period. Thus, a corrected mortality figure, excluding these infants, may be arrived at for those individuals having a palliative procedure, and this mortality of 38% represents primarily surgical deaths. No deaths occurred as a result of cardiac catheterization including balloon atrial septostomy or angiography.

The effect of partially or completely correcting the metabolic acidemia in these infants is presented in **Figure 1**. As is readily apparent, treatment employing sodium bicarbonate infusion, is extremely effective in improving the acid-base status. The differences between the pre-treatment and post-bicarbonate treatment groups are highly significant statistically both in respect to pH as well as base excess ($p = < .005$). In employing sodium bicarbonate, two methods of administration have been used: (1) rapid intravenous or intra-arterial "push" of all or part of the calculated dose or (2) long term administration over periods of two to eight hours usually of part of the calculated dose. Both methods are effective, with the former best employed for extreme acidemic states and the latter when lesser degrees of acidemia are encountered or are expected. THAM-E has been principally used in instances where prolonged use of large quantities of sodium bicarbonate has been considered inadvisable.

The results of successful palliative techniques with consequent increases in systemic arterial oxygen saturations are illustrated in **Figure 1**. The differences between the post bicarbonate treatment group and the post palliation group are not statistically significant (P [pH] $= > .10$; P [BE] $= > 0.5$) but, with the exception occasionally of the immediate post-operative period in those infants undergoing surgical palliation, administration of sodium bicarbonate has no longer been necessary and the palliative procedure has terminated the need for blood gas monitoring and treatment.

Discussion

As stated previously and exemplified by these patients, extreme acidemia is the direct result of varying, but invariably severe, degrees of hypoxemia which leads to tissue hypoxia. All of these infants had forms of congenital cardiac malformations, which resulted in either reduced flow of blood to the lungs or alteration of the circulation as to cause exclusion of sufficient amounts of blood with adequate oxygen saturation from the systemic circulation with hypoxemia the result. This, as mentioned above, has then resulted in lactic acid accumulation and finally a metabolic acidemia which, though in most instances temporarily treatable, was essentially irreversible so long as the underlying problem was unimproved.

Primary treatment of the cardiac malformation during infancy is usually palliative by one of several approaches. In the case of transposition of the great arteries, the procedure is either a closed atrial septostomy at the time of cardiac catheterization by the technique of Rashkind[9] or an open atrial septectomy by the procedure of Blalock and Hanlon[10]. When the problem is underperfusion of the pulmonary vascular bed caused by pulmonary stenosis or atresia, the procedures of choice may be any one of several surgical techniques for introducing systemic venous[11] or arterial blood[12,13] into the pulmonary circulation or direct attack upon the obstruction[14]. Palliative efforts with the hypoplastic left heart syndrome have been to the present totally unrewarding[8].

It has been our experience that complications both at catheterization as well as surgery are maximal when the condition of the infant is poor as occurs with profound metabolic acidemia, and these complications may be reduced by active and thorough management of the acidemia as required prior to, during and following such procedures on these infants until they are able to maintain compensation by themselves. Physiological compensation almost invariably follows successful palliation as systemic oxygen saturations rise.

Management of the infant with cyanotic heart disease in the prepalliation period consists of two basic elements. Thus, repeated and accurate monitoring of the infants' acid base status as soon as hypoxemia is suspected or recognized is mandatory with every effort made to maintain pH levels to at least 7.30 and base excess amounts to no lower than -6. In this range we consider the infant acceptable for catheterization or surgery although continued monitoring of blood gases throughout these procedures is essential and continues to be until the infant is able to maintain his own acid-base equilibrium. Treatment is aimed at restoring acid-base values to the above-mentioned levels or better by conversion of the metabolic acidemia through the use of sodium bicarbonate infusions. When dealing with severe hypoxemia and acidemia, the total calculated amount may be given immediately but should palliation have been performed with systemic oxygen saturations expected to rise, or should the problem be to significant extent ventilatory as indicated by blood gas analysis lesser amounts should be utilized, usually a fraction of the calculated dose administered initially with the remainder as slow infusion. In each case, as has been previously emphasized, the problem must be frequently re-evaluated by repeated acid-base monitoring with further treatment predicated by each result. If, as with some extreme cases, excessive amounts of sodium bicarbonate are required, serum sodium levels should be evaluated and THAM-E substituted for sodium bicarbonate if indicated.

The above outlined plan of management has had several major applications. The first and already outlined is in the pretreatment waiting period while the infant is being prepared for cardiac catheterization and palliative surgical procedures and similarly, in the management of the patient during such procedures. Of equal importance and applicable at a local level, is the use of such management in the preparation of the infant for transportation, if necessary, to the institution where diagnostic and palliative efforts are to be undertaken. Such preparation at either level may be life-saving allowing for the salvage of many infants for later total correction of their defects.

In conclusion a word of caution should be interjected. It must be established that the principal if not the only type of acidemia being treated is metabolic and that one is not dealing with a respiratory acidemic state. Such states may be found in infants with primary pulmonary conditions such as the respiratory distress syndrome and may be present in the infant with a congenital cardiac lesion either on the basis of coexisting pulmonary disease or pulmonary edema and should be treated with bicarbonate conservatively or not at all. Therefore, acid-base monitoring of the cyanotic infant ideally should include not only pH determination but calculation of pCO_2 and base excess values as well.

Summary

Experience with a population of infants with cyanotic forms of congenital heart disease is presented. Of greatest importance in the care of these patients is the recognition and prompt management of the metabolic acidemia usually found occurring in infants so afflicted. With active management as outlined, the mortality during pretreatment waiting periods and diagnostic and palliative procedures may be significantly improved with subsequent salvage of many individuals amenable to future total repair of their defects.

References

1. Folger, G.M., Jr.: Evaluation of the cyanotic infant with special reference to cardiovascular abnormalities. *J. Med Ass'n. Georgia* 55: 409, 1966.
2. Meschia, G., Cotter, J.R., Breathnach, C.S., and Barron, D.H.: The hemoglobin, oxygen, carbon dioxide and hydrogen ion concentrations in the umbilical bloods of sheep and goats as sampled via indwelling plastic catheters. *Quart. J. Exper. Physiol.* 50:185-195. 1965.
3. Acheson, G.H., Dawes, G.S. and Mott, J.C.: Oxygen Consumption and the arterial oxygen saturation in foetal and newborn lambs. *J. Physiol.* 135:623-643, 1957.
4. James, L.S., Weisbrot, I.M., Prince, C.E., Holaday, D.A. and Apgar, V.: The acid-base status of human infants in relation to birth asphyxia and the onset of respiration. *J. Pediat.* 52:379-394, 1958.
5. Huckabee, W.E.: Relationships of pyruvate and lactate during anaerobic metabolism. III. Effect of breathing low-oxygen gases. *J. Clin. Invest.* 37:264-271, 1958.
6. Astrup, P: A simple electrometric technique for the determination of carbon dioxide tension in blood and plasma, total content of carbon dioxide in plasma, and bicarbonate content in "separated" plasma at a fixed carbon dioxide tension (40 mmHg). *Scand. J. Clin. Lab. Invest.* 8:33-43, 1956.
7. Astrup, P., Andersen, O.S., Jorgensen, K. and Engel, K.: The acid-base metabolism. A new approach. *Lancet* 1:1035-1039, 1960.
8. Saied, A., and Folger, G.M.: Hypoplastic left heart syndrome. The Clinico-pathologic and hemodynamic correlation. *Amer. J. Cardiol.* 29:190-198, 1972.
9. Rashkind, W.J. and Miller, W.W.: Creation of an atrial septal defect without thoracotomy. A palliative approach to complete transposition of the great arteries. *J.A.M.A.* 196:991-992, 1966.
10. Blalock, A. and Hanlon, C.R.: The surgical treatment of complete transposition of the aorta and the pulmonary artery. *Surg., Gynec., Obstet.* 90:1-15, 1950.
11. Glenn, W.W.L.: Circulatory bypass of the right side of the heart. IV. Shunt between superior vena cava and distal right pulmonary artery — report of clinical application. *New. Eng. J. Med.* 259:117-120, 1958.
12. Blalock, A. and Taussig, H.B.: The surgical treatment of malformations of the heart in which there is pulmonary stenosis or pulmonary atresia. *J.A.M.A.* 128:189-202, 1945.
13. Waterston, D.J.: Treatment of Fallot's tetralogy in children under one year of age. *Rozhl. Chir.* 41:181-185, 1962.
14. Brock, R.C. and Campbell, M.: Infundibular resection or dilation for infundibular stenosis. *Brit. Heart J.* 12:403-424, 1950.

An obstetrical teaching case

By Charles S. Stevenson, MD
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A 21-year-old primigravid, married, white woman had made five prenatal visits to her physician. She was blood group O, Rh positive. Her weight was normal when first seen, and she followed the prescribed diet well, gaining 20 pounds by term. Manual pelvic mensuration had indicated that she had an adequate pelvis.

In her 40th calendar week she was admitted to the local hospital at 6 p.m., in early labor, just two days past her EDC. She was then having painful uterine contractions every four to five minutes. Her blood pressure was 120/80, temperature 98.6°, pulse 80, respirations 22, urinalysis negative. Her cervix was two centimeters dilated, about 60% effaced, and the infant's head was in LOA position and at minus-1 station.

Her labor progressed uneventfully, and at 11 p.m. she was given 40 mgms. of Nisentil intramuscularly because her labor had become very "active." Her contractions were then coming every 2½ minutes and were noted to be very strong.

Her cervix had been four cms. dilated at 11 p.m., but only 2 hours and 10 minutes later it was fully dilated and the vertex of the head had descended to the perineum. She was quickly put on the delivery table, "prepped and draped," and was directed to self administer Trilene analgesia.

At 1:24 a.m. she was delivered spontaneously of an active, normal, 6 pound 5 ounce infant, delivery occurring before the obstetrician had had time to make an episiotomy. The placenta delivered normally, and was believed to be complete and intact. The blood loss, as stated on the record, was "within normal limits," but the nurse's notes indicated that it was more than normal. The patient was given one ml. of Pitocin intramuscularly following delivery of the placenta. The physician left the hospital about 30 minutes after the completion of the delivery.

At 2:45 a.m. the night nurse called the physician at his home and reported that there was excessive vaginal bleeding and that the patient's pulse was 120 and of poor quality. The physician returned to the hospital at once, found excessive bleeding from her vagina, and her blood pressure was 104/60; he started an intravenous "drip" of Pitocin in 5% glucose solution, following which her uterus was noted to be "firm." He then went to sleep in the doctors' room in the hospital.

The night nurse woke him at 3:30 a.m., and reported that there was continued bleeding. The physician now found her blood pressure to be 80/40, her pulse 130, and she was "ashen pale," according to the record. He ordered her to be cross-matched with two pints of blood for transfusion, called a physician colleague in as a consultant, and the patient was put back on the delivery table. Both physicians scrubbed, cleaned up and redraped the patient, and, after giving her 75 mgms. of Demerol, each performed a sterile vaginal examination. A deep left lateral laceration of the cervix and lateral vaginal vault was found, and it extended upwards into the lower portion of the corpus of the uterus. They sutured it closed with deep, single, interrupted sutures of chromic gut. The cervix and vagina were packed with a gauze pack. It was now 4:30 a.m.

By 4:45 a.m. she had received two liters of 5% glucose in water, with one ml. of Pitocin in each bottle, but the blood for transfusion was not yet available. Her blood pressure now was 50/0, so 2 ml. of Coramine was given intramuscularly, and a nurse commenced the administration of oxygen by mask. The patient next received some Aramine, Vasoxyl and adrenalin. One unit of blood became available at 5:30 a.m., and as its intravenous administration was being commenced cardiac standstill occurred. One physician put a regular anesthesia mask on her face and manually respired her with oxygen by squeezing the bag; the other physician attempted closed chest external cardiac massage, but to no avail. She was pronounced dead at 5:40 a.m. The cause of her death was listed as "postpartum hemorrhage" on the death certificate.

Comments by the Study Committee

One point made as the data on this case was being collected was that the night nurse on duty, whose usual work was in the Medical Department, had changed the sheets and pad under this patient "a dozen times," and so the physician did not get to visualize and appreciate the full extent of the blood loss. Also, this hospital was having only about 150 deliveries a year at the time, and

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Doctor Stevenson is Chairman of the Maternal Mortality Study Sub-Committee of the Maternal and Perinatal Health Committee of MSMS. This case report is compiled from several generally similar ones, the most prominent teaching points of them being utilized.

did not have a regular obstetrical nursing staff nor any recovery room, and there were no resident physicians nor internes on night duty. One point that the physician apparently did not know, or sufficiently appreciate, was that at night in this hospital it usually required about two hours to get blood matched for transfusion once the order for it had been given.

If a careful inspection of the cervix and vaginal vault, using regular vaginal retractors, had been done at the time of delivery, just as soon as the placenta had been lifted out of the vagina, the cervix and vault laceration would have been discovered and it could have been sutured at once before it really began to bleed copiously. Also, if the physician had remained with the patient for 45 to 60 minutes following her delivery, and had himself carefully checked her for vaginal bleeding before leaving the hospital, he would have discovered the laceration by sterile pelvic examination and could have repaired it then and there. Failing this, had he done such examination when he returned to the hospital at about 3 a.m., instead of only starting an intravenous Pitocin "drip," and had he then also ordered the blood for transfusion, he still could have averted the tragedy. By the time the night nurse awoke him at 3:30 a.m., it was already too late (as it turned out). What he had done up until this time was far *too little,* and when he finally did order the blood for transfusion, and telephoned his colleague to come into the hospital to help him, he was *too late.*

It was learned that the patient had refused to go to a large, well equipped and staffed hospital in a city only 36 miles (36 minutes) away for her delivery, and pressure brought to bear by the patient and her husband coerced the physician into delivering her in the local hospital against his best judgment. So, while most of the responsibility is on the part of the physician, some must rest on the shoulders of the patient and her husband.

The hospital was not really adequately equipped, either with competent staff, physical space, or necessary equipment or instruments, to be doing obstetrical deliveries, and it should not have been accepting obstetrical patients for delivery. Therefore some share of the responsibility for this tragic fatality must also be borne by the hospital's managers and board of directors.

Fortunately many smaller hospitals now have closed their obstetrical services, and efforts being made by physicians and health agencies to educate the public regarding the necessity of getting their babies delivered in hospitals having well developed and functioning obstetrical services are beginning to bring good results. It is believed that this tragic story of "too little and too late" will occur with decreasing frequency as the years pass.

MICHIGAN
DEPARTMENT
OF PUBLIC
HEALTH

Monthly Surveillance Report

Cases of Certain Diseases Reported
To the Michigan Department of Public Health
For the Four-Week Period Ending June 30, 1972

	1972 This 4-Week Period	1971 Same 4-Week Period	1972 Total To Above Date	1971 Total Same Date	Total Cases for 1971
Rubella	125	305	1,196	2,441	2,955
Congenital Rubella Syndrome	0	0	0	1	1
Measles	330	513	1,841	1,977	2,659
Whooping Cough	8	8	52	53	140
Diphtheria	0	0	1	0	1
Mumps	264	1,007	2,487	9,182	10,748
Scarlet Fever & Strep Sore Throat	649	655	7,278	7,360	11,244
Tetanus	0	0	1	0	7
Poliomyelitis (paralytic)	0	0	0	0	0
Hepatitis	271	319	2,245	2,592	4,828
Salmonellosis (other than S. typhi)	81	51	391	316	691
Typhoid Fever (S. typhi)	1	0	5	2	10
Shigellosis	53	21	269	94	295
Aseptic Meningitis	9	4	39	54	239
Encephalitis	6	12	39	66	108
Meningococcic Meningitis	2	5	29	47	64
H. Influenza Meningitis	8	13	42	47	82
Tuberculosis	129	149	932	981	1,824
Syphilis	365	405	2,536	2,137	4,689
Gonorrhea	1,845	1,697	11,098	9,992	22,115

Information can be supplied by the local health department on the local incidence of disease.

Maurice Reizen, M.D., Director
Michigan Department of Public Health

Pharmacogenetic determinant of cholinesterase and its implications

By Pang L. Man, MD
Northville

The classical electroconvulsive therapy has been widely used throughout the world for the last 30 years after first being introduced by Cerletti and Bini in Italy. Its efficacy in treating the severely depressed patients has been firmly established. The modified electroconvulsive therapy adopted a decade ago is considered to be superior to the classical one and more humane with fewer clinical complications which predominately are spinal fractures. However, prolonged apnea and even death have been reported after administering the short-acting muscle relaxant succinylcholine. Little has been known as to its mechanism until Churchill-Davidson & Griffiths pointed out in 1961[1] the effect of the Cholinesterase. Clinical routine to determine the Cholinesterase level is impossible due to the lack of a reliable and simple method although Garry, Routh[2] and Siders[3] worked independently to solve this problem. The recent CHE-tel technique has made the widespread clinical application possible.[4]

The pharmacogenetics have been postulated in great detail by Kalow[5] (1962). Our study seems to confirm his observation.

Method

Material:

Reagent A—Buffered DTNB—Color developer solution
Reagent B—Quinidine Sulfate—Inhibitor solution
Reagent C—Substrate—powder to be reconstituted prior to use

Procedure:

1. Before initiating the assay procedure, remove all reagents from refrigerated storage and allow to warm to room temperature.
2. Reconstitute one vial of reagent C by carefully adding 6.0 ml. of distilled water. Mix gently by swirling until complete reconstitution is accomplished. Each vial of substrate contains sufficient material for ten determinations. When stored at 2-8°c. the reconstituted substrate is stable for two weeks.
3. Label two test tubes (100 x 12.5 mm.) or matched curvettes "sample" and "blank" respectively. Add 4.0 ml. of reagent A to each tube. Place all tubes in a 37° c. incubation bath for 5 minutes.
4. To each tube add 20 λ (0.02 ml.) of serum or plasma and mix well. If foaming occurs, allow to dissipate before proceeding further.
5. Add 1.0 ml. of reagent B to the blank tube only.
6. While all the tubes are immersed in the incubation bath, add 0.50 ml. of reagent C to each of them. Mix well and set timer for 3 minutes.
7. After 3 minutes, immediately add 1.0 ml. of reagent B to the sample tube to stop the reaction.
8. The absorbance (optical density) of the final reaction solution must be measured within 30 minutes after the addition of reagent B. If test tubes are used, transfer the final reaction into clean, dry, matched curvettes.
9. Set the wave-length of the spectrophotometer to 410 mu. Adjust to zero absorbances with the blank in place.
10. Determine the absorbance (optical density) of unknowns and record these values.
11. If 12 mm. curvettes are used, CHE-tel values will be expressed as follows: Absorbance x 100 = CHE-tel units.

Results

The age, sex, hospital stay and abnormality are summarized as follows:

Table I

Number of patients	Sex		Mean Duration of Hospitalization	Mean Age	Low CHE (case #17)
	M	F			
50	25	25	15 years	42	1 (34.5 units)

The abnormal Cholinesterase level occurred in a white male patient, 38 years old, whose determination of the blood cholinesterase level taken at different times of the day were:

Doctor Man is director of research, Northville State Hospital.

Table II

9:00 a.m. — 34.5 units
2:00 p.m. — 35.4 units
11:00 p.m. — 29.8 units

The results of the four siblings of case #17 tested were:

Table III

Brother A	— 97.7 units	
Brother B	— 24.1 units	Below normal range
Brother C	— 25.1 units	
Sister	— 67.8 units	

Comment

Among the 50 patients we have tested, one patient's cholinesterase level (34.5 units) was lower than normal (normal range: 40-90 units). We repeatedly determined this patient's CHE level at different times of the day, namely, morning, afternoon and night and the results turned out to be quite consistently below normal limits. This patient has six brothers and a sister but their parents were deceased. Four siblings came for the blood test and three refused. Out of the four tested, two brothers showed abnormally low readings (see **Table III**). We feel that this is quite significant in terms of pharmacogenesis.

Jackson and his associates[6] found that one of their two patients with low CHE levels developed moderately prolonged apnea following electroconvulsive therapy utilizing minimal dosages of succinylcholine 6 mg. (customary dosage: 18-20 mg.). If this patient had been given the regular dosage, serious consequences may have ensued. In our series, one out of 50 patients had a low CHE level. Thus, the frequency of encountering a low CHE level patient should not be overlooked.

Summary

Testing 50 schizophrenics with CHE-tel to determine the cholinesterase level using normal human serum as its control, we find that the CHE level of one patient is lower than normal. Two of the patient's brothers also had an abnormal cholinesterase level. The study seems to support the theory of pharmacogenesis of cholinesterase and the importance of the routine CHE level determination before administering succinylcholine during the course of surgery and modified E.C.T.

My thanks to Dr. Calvin Chen for his reviewing the paper before submission and Dr. S. K. Chan and Mrs. Ann Reibling for their technical assistance.

References

1. Churchill-Davidson, H.C., Griffiths, W.J. *British Med. Journal,* p. 994, October 14, 1961.
2. Garry, P., Routh, J. A micro method for serum cholinesterase, *Clin. Chem.* 11:91, 1965.
3. Siders, G.B. et al., Serum Cholinesterase Activity, *Am. J. of Clinical Pathology,* Vol. 50, No. 3, Sept. 1968.
4. Pfizer Co., Diagnostic Division.
5. Kalow, W., "Pharmacogenetics," W. B. Saunders Co., Philadelphia, Pa. 1962.
6. Jacobson, A. et al. A new test for cholinesterase (CHE), *Diseases of Nervous System,* Vol. 30, Oct. 1969.

MM article on office OB nurse brings response

F. W. Jeffries, MD
Meredith Lentz, R.N.
Ann Arbor, Michigan

It was with great interest that I read your article, "Expanding the Role of the Office Obstetric Nurse," in the March, 1972, issue of *Michigan Medicine.* While the results of your study are indeed impressive, I think that the rationale on which you seem to base them, namely that the "arms, legs, and brains of the physician" were extended, is not sufficient to explain the results.

In support of this thesis, I am enclosing an article by Gerald Caplan and would also suggest reference to two other articles that might aid both in articulating the reasons for the success of your project and in further developing the role of the nurses associated with your practice. These articles are:

> Murphy, Juanita. "Role Expansion or Role Extension: Some Conceptual Differences." Nursing Forum IX, No. 4 (1970), 380-90.
>
> Rubin, Reva. "Attainment of the Maternal Role. Part I: Processes. Part II: Models and Referrants." *Nursing Research* XVI (Summer, 1967), 237-45; and XVI (Fall, 1967), 342-46.

With every good wish for your continued success, I am

Sincerely,
Mary Ann DeSantis, M.S.N.

Basic science and health care

By Edward D. Coppola, MD
East Lansing

The following article is taken from the text of the Convocation Address to the Michigan State University College of Human Medicine, given at the beginning of the 1971-72 school year.

The traditions of basic science are rich, extend back hundreds of years, and are deeply rooted in medicine. Among the names you should know are those of Abroise Paré, born 1510 - died 1590 - a military surgeon who replaced cauterization with boiling oil by the ligature, which he invented; Andrea Vesalius, born 1514 - died 1564 - a surgeon and anatomist who by direct observation and dissection of the human body challenged the erroneous teachings of the Roman physician, Galen, that had been in vogue for 700 years; William Harvey, born 1578 - died 1657 - physician and anatomist who discovered the circulation of the blood; Giovanni Morgagni, born 1682 - died 1771 - who single-handedly founded the field of pathological anatomy; the Hunter brothers, John and William, physicians whose lives spanned nearly the entire 18th century, and who advanced not only the sciences of anatomy and physiology but botany and zoology as well; Edward Jenner, born 1749 - died 1823 - physician and pupil of John Hunter who devised the vaccination for smallpox still in use today (incidentally, Jenner was awarded £30,000 for this work, so we see that even the skills of government grantsmanship are not just a recent development); Claude Bernard, born 1813 - died 1878 - who devised the physiological concept of homeostasis; Rudolf Virchow, born 1821 - died 1902 - the founder of cellular pathology; Louis Pasteur, born 1822 - died 1895 - who discovered that bacteria are a cause of infectious disease; Joseph Lister, born 1827 - died 1912 - the discoverer of antisepsis (you may be surprised to know that Lister lived well into the present century); Walter Cannon, born 1871 - died 1945 - an outstanding contributor to the science of physiology.

Of all these men, only one, Pasteur, was not a physician. The basic sciences as we know them today came from medicine. Their reductionist fragmentation away from medicine and from each other, although a necessary historical development, has created problems for us now as we, as physicians, try to correlate and apply them to problems of human disease.

I am not talking about the problems of applying recent advances in medical science to all those who need them, or about the complicated problems of delivering first class medical care to all our people. These are social, political and economic issues inextricably interwoven with issues of political government, policies of taxation, economic influence, organizational freedom, and the setting of national goals and priorities by our people themselves. The recent literature addressed to these concerns has reached massive proportions and continues to grow more bulky each day.

I am talking about the question of how the benefits of basic science, the use of it, get to, or do not get to patients through the intermediary of a patient's physician. I wish to make an important distinction here between the social condition and the individual condition. Social change or betterment (even that related to improving health) may, in some cases, work to the disadvantage of particular groups. What I wish to consider instead is the problem of improving the often tragic individual condition through a specific consulting relationship - an encounter between a single patient and a single physician. How does, or should, basic science help a doctor to help a patient who comes to him with a subjective symptom or an objective sign that makes that person think he might have something wrong with him?

What does a patient expect from his doctor? He expects that the doctor will render him a service - will serve his needs - and that in serving those needs this particular doctor will be an expert - he will have medical, that is clinical, expertise. He does not expect the doctor to perform an experiment on him in order to test a hypothesis or validate a scientific "truth." He expects, in a word, "good results." It is partly this expectation of good results as an outcome, preferably regularly reproducible - every time - that distinguishes clinical medicine to a large extent from basic science. (I'll return to the issue of expectation of "good results" later.) If, while doing this, the

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Doctor Coppola is chairman of the Department of Surgery, Michigan State University College of Human Medicine.

doctor can at the same time be humane and considerate, well and good. But the first and most important qualification is that he be medically scientifically competent. Compassion alone can never be a substitute for knowing the correct dose of digitalis for a patient in heart failure or, worse still, not knowing that administration of digitalis is indicated in the first place.

What, then, should this clinical expertise consist of? What should the individual physician be able to do? He should be able to do four things with an acceptable level of competence.

First, he should be able to make a dignosis - that is, figure out what is wrong with this patient.

Second, he should be able to understand the cause or causes of the particular malady - its etiology - and the pathologic mechanisms underlying it.

Third, he should be able to remedy it - fix it - set it right - what we call treatment.

And, fourth, he should be able to predict what will happen to this patient in the future - that is, give a prognosis or prognosticate - and be able to prevent future episodes of disease in that patient.

It is within the context of these four clinical skills that I would like to share with you some views on the relationship of basic science to health care - the contexts of the skills of diagnosis, understanding the causes and mechanisms of disease, treatment, and prognosis and prevention.

In brief, it seems to me that the scientific fastenings of each of the four legs of this four-legged stool vary so considerably, that it is in danger of becoming a very shaky piece of furniture upon which to stand.

My thesis is that the major contributions of basic science to health have been made in the second category - understanding the causes and mechanisms of disease - and that the skills of diagnosis, treatment, prognosis and prevention are at present so lacking a firm scientific base as to impair seriously our efforts to organize the delivery of health care to large numbers of people in a rational way. Worse still, where basic science knowledge and information is available in the second category, we often fail to utilize it and apply it to the everyday care of our patients.

Making A Diagnosis

First, let's look at diagnosis. The closest we have come to a scientific definition of health is to describe it as a state of physical and mental well-being. If the volume and success of television commercials, advertising proprietary remedies, is any indication of health so defined, then the American people must be the most disease-ridden on earth. We need better, more scientific definitions of health. But a recent computer search of the world's medical literature, covering a period of nearly four years, yielded only 141 references to health, of which three quarters were concerned primarily with mental health.

There is more and more evidence to show that many laboratory tests have defined too narrow a range of normal values, probably because most of these data were obtained on "healthy" medical students, the classical volunteers for human experimentation. It may well be that for certain other groups of people, "normal" values may lie outside presently acceptable ranges. The difficulties such information raises for interpreting the value and significance of various screening tests and procedures is obvious.

It is often difficult for doctors to agree on normality and abnormality. We lack a basic science for defining the criteria of when disease is present or not. I am not talking here about an obvious case of acute appendicitis, although even making that diagnosis may present serious problems. But the establishment of criteria of disease, particularly for those entities of unknown cause or multifactorial origin, is an immediate, imperative need. We urgently need a new kind of basic science in this area. One example will suffice. In a study of the advisability of tonsillectomy, of 1,000 children examined 611 had already had their tonsils removed. Of the 389 remaining, 174 were advised to have a tonsillectomy when examined by other physicians, leaving 215 with evidently normal tonsils. A new group of doctors then was asked to examine these 215 children and 99 of them were selected for tonsillectomy. One author, commenting on this study, remarked that "like the teacher who gives a certain proportion of failing grades, no matter what the overall quality of his class, so the physicians studied were inclined to remove a certain proportion of tonsils no matter what the range of signs observed."

We need also a basic science of diagnostic problem-solving. We need to examine what it is that the good clinician does when he selects, from the thousands of bits of information presented to him by a particular patient, those five or 10 that are significant - whether from the patient's facial expression or tone of voice or posture, or from physical examination or from sophisticated biochemical tests, or from the newest instrumentation involving the use of radioisotopes, ultrasound or thermography. We need a basic science of diagnostic problem-solving which can be learned and taught. To continue to regard this complicated process as an intuitive art, not susceptible to scientific investigation, would be the grandest of mistakes at this crucial time in the history of medicine. I submit that a close look by medical science at the various branches of epistomology may provide some tools for serious investigations into this process. Such branches of learning as symbolic logic, the theory of gaming, set theory and so on may be worthy of our interest and study as clinicians. But to examine them as isolated disciplines and learn them as separate courses will be less fruitful than an earnest effort to apply them to real clinical problems.

It is necessary to add, though, that we fail more than just occasionally to apply the diagnostic skills and knowledge we already have. For example, it is well known that a history of urinary bladder catheterization is common in people with urinary tract infection. Of 133 new patients admitted to the general medical clinic of a midwestern university hospital, 51 people who had been catheterized were not questioned about previous catheterization by the clinic team. Besides failing to ask proper questions, the clinic team failed to act properly in treating 37 of 68 patients about whom information on catheterization was available. But performance by the clinic team, including medical students and physicians, on a written examination on urinary tract infection was outstanding. I commend this study to your attention with the observation that there are those who don't know - there are those who know but don't translate into action - and there are those who know and translate into action.

Understanding the Etiology and Mechanisms of Disease

Second, let's look at understanding the etiology and mechanisms of disease. I believe that most of the impact of the basic sciences on health care has been in the area of understanding the etiology and mechanisms of disease. This, as we have seen, was a natural historical development. It is worth pointing out, though, that we have benefited recently from continued advances even in the venerable field of gross anatomy. Only within the last 10 years has the distribution of blood vessels in the liver been carefully investigated, and this in response to the surgeon's need for that information as liver resection became feasible.

But as scientific reductionism has resulted in greater and greater fragmentation of the basic sciences from each other and from medicine itself, in like proportion it has become harder and harder to have medical students learn basic scientific principles and information in a way that will be helpful in the everyday care of patients. Medical students have been taught an overwhelming mass of facts (and I use the word facts advisedly) presented in the first two years of medical school, to be digested indiscriminately and as quickly as possible, and forgotten as soon as the last final examination was safely gotten through. Basic scientists have faded from the clinical wards and few physicians ever go back to the laboratory - although some do and have made splendid scientific contributions from the basic scientists' home turf.

One difficulty with this kind of medical education is that recall of information one year after the end of a course has been measured to be about 20%. The solution proposed by some teachers to that problem has been to teach 200% instead of 100% in the same amount of time, on the assumption that then there would be a net recall at one year of 40% instead of 20%. The trouble with this is that no one can predict which 20% or 40% is going to be remembered.

I would like to give you a commonplace example of this dilemma. Large ulcers in the region of the ankle, resulting from disease in the veins of the leg, are a common cause of disability and account for the loss of thousands of man-hours of work every year in this country. Their cause can be explained by a few basic physiological facts having to do with the circulation of blood, the function of the valves in the veins, physical hydrostatic pressure and the Starling hypothesis, which, for practical purposes, explains the mechanism of transfer of fluids from the bloodstream, across capillary membrances, to the surrounding tissues and back. These ulcers can be readily healed by reducing the pressure in the leg veins. This may be accomplished simply by advising the patient to lie down with his leg elevated for a period of time, or by having him wear a well-fitted elastic stocking or both. In my experience, nearly all medical students, after two years of studying basic science, including a complete course in physiology, are unable spontaneously either to explain the cause of these ulcers or recommend this simple treatment when confronted with such a patient. Furthermore, I've seen many such patients walking about, without elastic compression, and dutifully but ineffectually applying to their sores for months on end the salves and ointments prescribed by physicians who have still not made the connection between the lesion they are treating and its underlying pathophysiological mechanisms and causation.

This medical school is trying to bridge the gap between basic science information and its application in clinical practice by introducing such innovative teaching exercises as the focal problems, in which clinicians from several disciplines join together in time and place with basic scientists and medical students to consider the solution of real clinical problems as a group. You will be involved in these experiences before very long.

Treatment

Third, let's look at treatment. When we consider the basic sciences in relation to treatment, we are on much less firm ground than when we consider mechanisms of disease. First of all it may surprise you to know that the natural history of most human diseases is not known - that is, the sequence of events beginning with the healthy state, before a disease begins and proceeding to subclinical and clinical manifestations resulting in either spontaneous cure, chronicity or death. Second, the cause or causes of many important diseases are not known, for example: arteriosclerotic heart disease, generalized arteriosclerosis, cancer, high blood pressure, the collagen diseases and most diseases of the immune system. When the causes of disease are not known, treatment is empirical, by trial and error.

It's easy to see that our ignorance of causation combined with our ignorance of the natural history of disease, in the setting of a sick patient asking for "good results," is a situation that would make a basic scientist's hair stand on end! There are just too many unknowns and too many variables. Add to this the patient's social and cultural environment which should make us raise such questions as - did he really take that medicine three times a day, could he afford to buy it in the first place, did he really keep his leg elevated overnight, did he understand my instructions correctly - and one can see that the difficulties of evaluating the effectiveness of a proposed treatment scientifically, under these circumstances, are staggering - and may well be insuperable in many instances, given the present state of our knowledge. Seen in this light, the exquisitely controlled *in vitro* experiment performed in the basic scientist's own laboratory, at a time of his own choosing, becomes the clinician's impossible dream.

These difficulties are well demonstrated by problems confronting the University Group Diabetes Program, a long-term prospective clinical trial of the benefit of varying doses of insulin and oral hypoglycemic agents on the clinical course of diabetes mellitus. This study, involving 12 clinical centers and 1,000 patients was begun in 1961. The results so far are the subject of lively dispute between a number of respected clinical investigators. The only thing they have agreed on in the 10 years since the study began is that more studies need to be done!

The point is that professional, scholarly, scientific criteria are often extremely difficult to apply to evaluating the results of medical treatment. But prospective randomized therapeutic trials should not be abandoned. Rather, we need a valid basic science appropriate to this kind of clinical investigation so that such studies may be properly designed, carried out and evaluated. Perhaps some of you in this medical class will contribute to this effort.

Prognosis and Prevention

Last, let's look at prognosis and prevention of disease. Patients often ask their doctor, "What will happen to me in the future?" They are asking for a prediction. Sometimes we can predict the future course of events with certainty, but usually this is when the disease is so inexorably fatal that the outcome is obvious to anyone. But I can't tell you which one of you will have a common cold this winter, or when. An epidemiologist might accurately predict how many of you will have one, but not whether you as an individual will. This is the difference between prognosis and statistics. Each person is separate from every other and what happens to you happens 100 percent of the time. Here, more than anywhere, we lack basic scientific knowledge and skills. A basic science of medical prognostication is simply not available. I do not believe this knowledge and these skills will come from any amount of laboratory investigation. They will be developed only through the most meticulous objective clinical investigation and observation, using the power of the eye, the ear, the hand, the brain, and the machine to examine clinical experience carefully, to gather information systematically, to record it accurately, and to sift and scruntize it in all kinds of patterns and combinations. For this we will require new kinds of medical record keeping and retrieval. The new basic science of information handling and control promises to play a very important role in our collective medical future. No medical student should graduate with a medical degree these days without a basic understanding of electronic computer theory and technology.

Our ability to prevent disease, except for cer-

(Continued on page 707)

Drug therapy problems

By John Marien, RPh
Ann Arbor

Q. Is there an established dosage schedule for propranolol in children? J.V., Ann Arbor

A. *There is no established dose, but the following regimen has been reported: initial dose of 1 to 3 mg. I.V. This may be repeated once more in a few minutes. Then 4 hours later, start oral medication if possible. 1 mg./Kilogram/24 hours in 4 divided doses.*

Q. Will methadone interfere with laboratory tests? B.M., Detroit

A. *Methadone may cause increased B.S.P. retention.*

Q. A patient demonstrates dependence on methaqualone (Quaalude®). Should the drug be withdrawn slowly? D.H., Ann Arbor

A. *Yes, reactions resembling delerium tremens have been observed following sudden withdrawal. Some practitioners believe that methaqualone should be classified as a physical dependence-producing drug. There have been reported cases of addiction in Great Britain and widespread reports of abuse from Japan.*

Q. How effective is carbenicillin in crossing the blood-brain barrier and what spinal fluid levels can be obtained? D.L., Ann Arbor

A. *A 1 Gm. I.M. dose yields peak serum levels of 18-25 microgram/ml. Approximately 15% of serum levels appear in normal meninges with slightly higher levels in inflamed meninges. Therapeutic concentrations are not obtained, however.*

Q. How long after withdrawal of methyldopa (Aldomet®) will a positive Coombs test become normal? J.T., Detroit

A. *The time varies from a few weeks to 6 months.*

Mr. Marien is associated with the Drug Information Center at University Hospital, Ann Arbor.

tain infections, is limited at present, for many of the reasons I have already stated. But, the behavioral sciences have much to offer us here. We as physicians need to know more about why people do or don't do certain things, more about community life, more about culture and group process, more about the nature of personal growth and self-actualization. A recent *New York Times* article reported a rising incidence of measles in that community because people are not getting themselves vaccinated - for reasons unknown.

We need answers to other questions. Will early detection by mammography of microscopic foci of breast cancer in women prevent death from that all too common disease? What should be done about such lesions? Should they be treated or observed; if treated, with what kind of treatment? If preclinical abnormalities of other systems or organs are detected by new screening procedures, what should be done about them? What proportion of these abnormalities will blossom into clinically significant disease? Why is it that we can predict who will have a heart attack with only 25 percent accuracy at present? I suggest that the answers to these and other questions will come increasingly from more fruitful collaboration between basic scientists, behavioral scientists, and clinicians of many backgrounds and disciplines. Michigan State University has a rich tradition of inter-collegiate and inter-departmental collaboration. We will look forward to extending this tradition of collaboration to include the clinical medical sciences which are now being added to this campus.

Alvin Feinstein has written: "A clinician is always a healer; the healing function is basic to his care of sick people. The scientific performance of that function, however, is what distinguishes a well-trained medical or surgical clinician from other healers whose aid and comfort is given without the rational support of valid evidence, logical analysis, and demonstrable proofs." These are words worth remembering.

Physicians share many of the apprehensions held by medical students about what their function as physicians in the next forty or fifty years of their medical professional lives will be. It is becoming increasingly certain, however, that beyond our personal responsibility to the individual patient we, as physicians, will have in the immediate future much more public responsibility, as a result of our professional expertise, for translating the principle of health care as a right into actuality.

My personal hope is that as you proceed through medical school you will distinguish and perceive the difference between learning to apply basic science humanely to the care of sick people and the temptation, always present, to play the role of omnipotent doctor.

Perinatal Tips

By Paul M. Zavell, MD
Detroit

The following case from the files of the Wayne County Medical Society Perinatal Mortality Committee is presented as an aid in continuing education.

Maternal

This was the first-born of this 37-year-old gravida II, para 0 (I) diabetic mother. She had had a spontaneous abortion three years previously (probably because she rebelled against the idea of being diabetic and hence she failed to take her insulin regularly). She was brought into the hospital at 36 weeks of pregnancy when a low transverse primary C-Section was performed. She had been well controlled on 30 units of Lente Insulin and an appropriate diabetic diet.

Fetal

This six pound, 3½ ounce female had an Apgar of 10 at one minute but by five minutes of age, mild to moderate respiratory distress with irregular breathing, peripheral cyanosis and substernal retractions developed. All these improved when the stomach was aspirated of its contents and O_2 and mist in an isolette were administered. However, by three hrs of age grunting and tachypnea with retraction returned.

A chest X-ray was normal. Cord hemoglobin was 18.0 gm and Bilirubin was 1.8 mgm %. Blood glucose at five hrs of age was 45 and electrolytes (Na, K, Cl, CO_2 were all normal. Use of I.V. 10% D/W and O_2 and mist seemed to bring the infant around to normal by 24 hours of age. I.V. Fluids were stopped, being replaced by oral formula feeding.

Everything seemed to go along fine until the sixth day of life when the right heel was noted to be swollen, red and warm. The infant's temperature spiked to 100.2° (R). Because an infection secondary to prior heel puncture for blood studies was suspected the infant was started on I.M. Penicillin and I.M. Kanamycin. However, by the next day the infection extended to the right knee with prominent swelling of the right knee and ankle and Temperature went up to 102° (R). The heel was draining serous purulent material from the site of the previous puncture. The antibiotics were changed to I.V. Methicillin and I.M. Kanamycin. This cellulitis with local abscess seemed to respond well so that the infant gradually improved.

However, it was necessary a few days later to do an incision and drainage of the abscess of the right knee. Cultures from the heel purulent material and from the knee abscess revealed Staphylococcus aureus coagulose positive sensitive to all antibiotics except Penicillin G and Ampicillin. By the 10th day of life the infant was changed from I.M. and I.V. Antibiotics to oral Sodium Cloxacillin (Tegopen). On the 20th day of life X-rays showed evidence of osteomyelitis of the os calcis. After discharge from the hospital the infant was kept on oral sodium Cloxacillin for six weeks. At the age of 5½ months the infant's physical exam was normal except for some irregularity of the os calcis but X-ray revealed no evidence of osteomyelitis.

Perinatal Committee Comments

1. This case very clearly demonstrates the necessity to follow sterile technique in all instances where this is required. Even "routine" procedure must be done with care.
2. It is important when treating known or suspected osteomyelitis to continue treatment for an *extended* period of time and not be lulled into a feeling of security when external conditions seem to be normal.
3. The importance of obtaining reliable sensitivities when doing cultures is pointed out here. Use of this information helps to treat the patient with greater chance of success.
4. C-Section at 36 to 38 wks. gestation in a complicated diabetic pregnant mother or one who has suffered a prior infant loss is recommended.

Zip code 48823

Are the end results of HMG therapy misrepresented?

Editor's Note: The following letter is offered because, says the author, "I find that many periodicals are interested only in new and original ideas or opinions on the therapy of infertility and not with the validity of these ideas. It seems, however, highly desirable that someone should call attention to some of the faulty ideas or practices which arise so frequently from uncontrolled academic research concerning the endocrine therapy of infertility."

To the Editor:

Popular perception of the clinical value of human menopausal gonadotropin (HMG) for the induction of ovulation seems to be based upon very insecure evidence. A rather representative report by Thomson and the Cutter Laboratories concerns 1193 patients and this provides the basis for the commercial promotion of HMG therapy. Although the ethical use of this product presumably concerns individuals with a proven pituitary deficiency, the data give little evidence of the inclusion of such cases; but rather its empirical use with a wide variety of clinical categories associated with infertility.

The ratio of subsequent normal gestations with different clinical conditions ranged between 12 and 31.%, with a mean of 16.%; but the actual clinical value is uncertain because of the omission of clinical control series. Gemzell has reported HMG therapy with 305 patients, of whom 15 or 4.7% presented evidence of a pituitary deficiency. Most of his cases as the Cutter Laboratory series, were without a proven endocrine disorder, so that the therapy was more or less empiric, based on infertility or cyclic irregularities.

The data indicate that many of the patients in these series were ovulating more or less frequently prior to therapy and that the ratio of cures with the strictly anovulatory and those with irregular cycle was not determined. Furthermore, the end results were obscured because of questionable diagnostic criteria upon which the therapy was based. For instance, the diagnosis of polycystic ovaries was merely presumptive and in consideration of the large number of such patients which researchers on hormone therapy have been able to assemble in contrast to their very low clinical incidence (1 to 1.%), it is very evident that the figures on polycystic ovaries are highly fictitious. It is indeed very possible that the success rate 12.8% for polycystic ovaries and 16.% for the combined anovulation and irregular cycle groups might have been exceeded by a properly constituted control series.

The cost of HMG therapy in relation to the ratio of successes may be very important from the clinical viewpoint. Thus a treatment course of HMG consists of 8 to 10 injections which at the current price of $9 per ampoule would cost the patient about $90 for the HMG alone. 12 to 26 treatment courses have been required for each normal gestation, varying according to the type of patients treated. For primary amenorrhea, an average of 26 courses ($2340) were required per normal gestation. The group composed of those with anovulation and irregular cycles required on the average 12 courses ($1080), and the presumed polycystic ovary group required 22 courses ($1980) per normal gestation, to which must be added the expense of laboratory controls and presumably a charge for professional services. That which is feasible under conditions of academic research subsidized by a pharmaceutical house, may be entirely impracticable in the ethical handling of infertility in the private practice of medicine.

Some of the major medical periodicals, including those dealing with gynecology, endocrinology and fertility limit their pages to new and original academic research with no attempt whatever at a clinical evaluation of this material. The opinions as set forth without the benefit of clinical controls are commonly accepted by the casual reader without question, thus assuring the perpetuation of many faulty beliefs and therapies over a period of many years. Consequently, it is suggested that those dealing with the clinical aspects of infertility might well scrutinize much more carefully the various research reports concerned with the therapy of infertility before accepting the opinions and hypotheses of others as a justification for different types of therapy.

Walter W. Williams, MD
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Springfeld Hospital
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REFERENCES

1. Thompson, Charles R. and Hansen, Laura M. Pergonal (menatropins) A Summary of Clinical Experiences in the Induction of Ovulation. Fert. & Steril. 21 (12): 844-853, 1970.
2. Cutter Laboratories, Treatment of female infertility with Pergonal (menatropins) Product Information, Pub. by Cutter Laboratories, 1970.
3. Gemzell, Carl. Induction of Ovulation with Human Gonadotropins. Int. J. Obstet. & Gynec., 8 (4): 593-599, 1970.

Meet some amazing Michigan doctors . . .

Doctor Ganos races to win; he's successful, too

Here's a tip: take in the harness racing at Detroit's Windsor Raceway this summer and you might find it worthwhile to place your money on the green and black carried by geldings My JT and Muddy Royal, and stallions Imperial Consul and Muddy Chips.

They're owned and trained by Allen Park family physician Thomas Ganos, MD, and they're doing well. In fact, Doctor Ganos has made money all seven years he's been racing his horses. He is, therefore, among the 10% of racing horse owners who can claim success, he says.

Last year alone Doctor Ganos, who has his groom's and trainer's licenses and is awaiting the processing for his provisional driver's license, grossed $32,000 with his horses. He estimates he's grossed $100,000 in the several years he's raced.

"Of course there are a lot of expenses involved," he qualifies. "It costs $6,000 to $7,000 per year just to race each horse." And though Doctor Ganos is a qualified trainer himself, he has a full-time trainer at work at a 15-acre farmette east of Windsor, Ontario, complete with a training track.

Doctor Ganos owns seven horses altogether (three are young colts in training) and spends about 20 hours a week himself working with them.

A member of the U.S. and Canadian Trotting Associations, Doctor Ganos holds trainer's licenses in Michigan, New York, Ohio and Ontario. The licenses permit him to train the horses and on the night of a race to warm them up, even taking them on the last warm-up mile before the race.

With his driver's license, which he expects to get some time this year, Doctor Ganos will himself race the horses in parimutuel events, and fairs.

Doctor Ganos first owned Thoroughbreds, hired a trainer and raced them in saddle events in Detroit and Florida.

"But then I just owned the horses, and I didn't quite get the enjoyment I would have liked from the horses," recalls Doctor Ganos. So when one of his patients, a trotting horse trainer, offered him the opportunity to jog a couple horses, "I really got interested," says Doctor Ganos. "I started jogging the horses in the morning, training them, doing the things the grooms do."

Doctor Ganos with one of his colts.

Three mornings a week Doctor Ganos gets up at five to spend two hours with his colts. Then there is time to be spent at the track.

"Most full-time trainers who hold such a schedule nap in the afternoon. I don't—there's no way," says Doctor Ganos. "But it's a matter of a judgment of time. You can do many things if you spend adequate time at each."

During the summer, Doctor Ganos manages to spend even more time with his horses. It's then that his family - wife Gaye and six children - live at their cottage in Belle River, 20 miles east of Windsor.

The doctor commutes to the farm 10 miles east of the city and his Park Avenue Medical Group, P.C., in Allen Park, where he is corporation president. Doctor Ganos also is a diplomate of the American Academy of Family Physicians.

Doctor Ganos' family enjoys the horses, too, and two daughters, Lisa, 15, and Beverly, 22, have a deep interest. Beverly is earning her groom's license, and Lisa has her own colt and is planning to earn the groom's license.

But the secret of Doctor Ganos' racing success?

"I run fewer races than most owners, I run for purses and I run to win," he says. "And I run a higher class of horse than many. You've got to have horses that are capable of making $10,000 to $14,000 a year and winning at least five times a year."

Doctor Bates is 'resident gardener' at Lansing facility

When patients make last-minute cancellations in office appointments, Richard Bates, MD, Lansing internist, is likely to go pull weeds.

For Doctor Bates is self-established resident gardener at the Lansing Medical-Dental Building on East Grand River, where he has his office. Around May 15 each year, he himself plants the hundreds of individual petunia, marigold and aster plants about the building. He also plants tulips and daffodils for spring bloom and roses for perennial beauty. And, since it's a medical building he's beautifying, he takes special pains to always grow some digitalis, or foxglove, as it's more commonly known.

"We had the building landscaped by a professional when it was built 10 years ago," recalls Doctor Bates. "But I had them save space for annuals."

His colleagues in the building contribute the funds for seeds and supplies. "I put in the labor and have the fun," says Doctor Bates. He does hire help occasionally with the weeding.

"Gardening is good therapy for doctors," says Doctor Bates, referring to figures in the January 31 issue of *Medical Economics* which reveal that more doctors spend leisure-time gardening than pursuing any other hobby.

Beginning in February and using artificial lights in his basement, Doctor Bates grows about 10 different varieties of annuals from seed each year.

He likes to "play the field" with varieties of flowers, and declines to name any as his favorites.

A gardener from "way back," Doctor Bates raises vegetables and flowers at his East Lansing home. And he spends time each day he's in town taking care of the flowers at the medical-dental building. "Sometimes I just walk around the beds, look at the flowers and talk to them," he says.

Doctor Bates and roses in corner of medical-dental building.

Doctor Bates' enthusiasm has interested other physicians in the building in the flower-tending.

"Doctor (George D.) Stilwill looks out over the sunken garden and he's taken it over, with my blessing," says Doctor Bates. "He can't stand weeds, either.

"Weeds are like cancer. You've got to get in there fast. Plants are like people—meet their essential needs, check on them every day, and usually they respond."

Those famous Howell melons grown by Doctor May

Take a drive this month to the fertile fields around Howell, and you'll be just in time to help Earl Louis May, MD, harvest his melons.

They're cantaloupe, famous as the delicious Howell melons, with 14% sugar content, as opposed to the 9% sugar of most melons grown elsewhere. People all over Michigan know of them, and each year they are shipped to be consumed at the Chicago Saloon Club.

(Continued on page 712)

Making a sale of some of his famous Howell melons is E. Louis May, MD, Howell, left. The customer is Mrs. Mabel Smith, while Mrs. May, right, and Doctor May's son Gerry, rear, look on.

You'll find Doctor Paxton, of Fremont, backstage

As the curtain rose on the Fremont Civic Theater's recent production of "Cactus Flower," one of the persons most concerned with the successful outcome of the play was Robert Paxton, MD.

The Fremont family physician was the director. In fact, since coming to Fremont 17 years ago, Doctor Paxton has directed six plays, acted in two and been president "several times" of the Civic Theater Association.

Doctor Paxton was re-elected CTA president on June 26 for the coming year, and will therefore be called upon for advice as plans proceed for a new Fremont community building, which is to include a "real theater," he says.

"I try to become involved in no more than one play a year," comments Doctor Paxton, explaining his arrangement of time.

As director, he must read the script a dozen times, spend several hours "pre-blocking" the play, go over all the lighting and sound effects as well as design the set with the respective committee chairmen, and lead three or more rehearsals a week, of three hours' duration each, for six weeks before opening night.

He's able to work in that schedule because of his three-way partnership with two other Fremont doctors. "But there are no rehearsals the nights I'm on call."

Doctor Paxton's wife, Georgia, has been editor the past year of the Civic Theater newsletter, and his six children are all interested in dramatics, he notes.

Fremont play director Robert Paxton, MD.

Doctor Paxton first became interested in the theater while in pre-medical school at Calvin College, Grand Rapids, where he was active in Thespians and took interpretative reading courses. He did not pursue his interest during medical school.

"It's a matter of reading, the little experience I picked up in college and attending twice-yearly workshops sponsored by the Michigan Civic Theater Association," explains Doctor Paxton of his training for directing.

"It's a good outlet," adds the doctor, who also took up sky diving about five years ago and then suffered a broken leg in a diving mishap.

"In a sense directing is creative," he continues. "It gives a person the opportunity to deal with individuals in an entirely different way than in medicine."

DOCTOR MAY/Continued

Doctor May grows one-third of the Howell melons on his 120 acres (20 of them actually are seeded to cantaloupe) and this year, an average year, he expects to harvest some 84,000 of the juicy fruit.

Doctor May explains that he has the right combination in his land - the highest elevation in southeast Michigan, the state's relatively low humidity, and sandy alluvial soil deposited by a river which ran beneath the glaciers which covered Michigan.

He also maintains strict disease control, only raising the fruit on virgin land which never has grown muskmelon before, and spraying the crop once a week and after every rain. "Fungus diseases are the problem," he says, "and penicillin is a common fungus of melons."

On the 26th of this month, Howell will hold its annual Melon Festival, and Doctor May's cantaloupe will play a large part in the celebration.

His office girl was the first "Melon Queen" and brought Doctor May's attention to the fruit. Then he treated a grower bit by a rabid dog, and was repaid in melons.

"Well, the festival never had enough melons," Doctor May recounts. "So I decided to cure that."

Doctor May spends his two-week vacation late each summer picking and selling cantaloupes. Most are sold to area residents who come and buy them in person. Some are shipped around the state, but shipping is difficult, as the melons must be picked when ripe.

The rest of the 90-day summer growing season, Doctor May's wife and their nine children manage the crop. And the local Jaycees recruit high school kids to pick and crate the melons.

Doctor Sander with his violin.

Doctor Sander combines two loves: music and medicine

Charles Sander, MD, East Lansing, spent part of this summer in Aspen, Colo., where he attended the University of Colorado Branch Patho-biological Institute. He also participated in the Aspen Music Festival, enrolling in the festival school and playing in one of the festival orchestras.

For not only is Doctor Sander a pathologist, a co-researcher in the Michigan Placental Tissue Registry, he's also a violinist.

But that's not all. He also has a deep interest in comparative pathology and has been associated with the Michigan State University College of Veterinary Medicine where he has carried on studies in oncology, observing neoplasia in animals as it relates to the condition in man.

Doctor Sander teaches pathology in the MSU Colleges of Human and Osteopathic Medicine. And, each January, he gives a violin recital in the MSU Music Auditorium. He and his wife, Christiane, a violist, play with the Lansing Symphony Orchestra. Together they also go to Interlochen each summer to attend a chamber music workshop.

How does he do it?

"I try to keep most of my evenings free," says Doctor Sander, who practices two hours each evening. "I don't watch TV much."

Doctor Sander, the son of the late John Sander, MD, a Lansing pediatrician, began his college studies in music. He found, however, that he couldn't give up his lifelong desire to become a doctor and switched majors from music to premed.

He earned his MD degree from the University of Michigan, served a residency at Ohio State University, was chief resident at the Mallory Institute of Pathology at Boston City Hospital, an instructor at Tufts University, a teaching fellow at Harvard and a Fulbright Scholar in pathology at the University of London.

But he continued to practice the violin each day. "Some find it hard to keep their interest in music after leaving the field," he observes.

"Fortunately, I was never able to let it go completely."

Doctor Sander has noticed that music and medicine are not such an unusual combination.

"If you look over the country, you find many doctors in symphony orchestras. I've met some very fine musicians who are also fine physicians," he comments.

In the first 10 years of his life, Doctor Sander tried out the trombone, piano and drums but decided he had found his instrument when he heard a doctor play a violin solo in church. He began his studies at the age of 11 and was concertmaster of the East Lansing High School Symphony orchestra.

His father was a pediatrician for 40 years in East Lansing and Okemos, and was past president of the Ingham County Medical Society.

Your opinion please

MSMS asked the question:

"Do you believe community physicians should serve on student selection committees at the medical schools? (This is true at the University of Missouri Medical School at Kansas City.)"

These doctors replied:

Cecelia F. Hissong, MD
Earl R. Williams, MD
Battle Creek

Strange coincidence! The invitation to write about this topic arrived one day after we and our partners had been discussing it.

We had arrived at that discussion after lengthy conversation on how we can assure the public that an individual is fit morally, emotionally, and intellectually to serve them as a medical doctor. This "fitness" as a doctor obviously begins in the home long before a person's selection for medical school.

Unfortunately, in choosing a medical student, most emphasis has been placed on intellectual achievement rather than emotional health and stability.

All are important; however, more emphasis must be placed on the integrity and stability of the student seeking admission. Community physicians deal with human values constantly, and would be an excellent asset to any (and every) medical school selection committee. Most selection committees are dominated by academic people, many of whom are PhDs or who have never practiced clinical medicine. They are often ill-equipped to judge the fitness of those whom we plan to train to fill the need for more "people doctors."

At a time when many Michigan communities are "crying for physicians," a recent applicant at one of our state medical schools was told by his interviewer that he "very much doubted that I would be able to make a valuable contribution toward '. . . pushing back the barriers of ignorance in medical science while practicing general medicine out in the sticks'!" (This applicant had related his desire to practice in the Thumb area.)

Doctor
Hissong

More and more we are asked to "police our ranks" for the occasional "bad apple." It would seem to us this would be the logical place to practice preventive medicine and eliminate the emotionally disturbed or immature from clinical medicine instead of doing the painful surgery later. This is the time to prevent future "Doctor Scandals."

Let the professors select future professors. Let the physicians select future physicians.

Donald E. DeWitt, MD
Holland

The possibility of community physicians serving on medical school selection committees stimulates some interesting and worthwhile speculation.

Some readers might not be aware of the fact that this is being done in a number of schools already.

Certainly one would expect that the insight and experience of a "grass roots" community physician could make him a good judge of personality characteristics and traits, medical interest potential and motivation, and the presence or absence of the "moxie" necessary for dealing with sick people. A valuable prerequisite for physicians on such a board would be to have a particularly keen interest in the school and students.

This concept of utilizing community physicians opens the possibility of a more completely "structured" type of interview combined with clinical science, basic science, liberal arts and science, student and admissions office personnel interviewers. This would give a broader viewpoint and certainly a fairer approach to some of the students and probably a better use of time and more objectivity to this interviewing process. I use as background for this statement experiences of my classmates, myself, and some recently related interview reactions from students.

The community physician could compound the above points by practically and skillfully sounding out the applicant for a general, but mature concern for people and for health care, or "primary care" as it is called today. Certainly areas of insight would be offered here not available from those without his community experience.

I also think publicizing the presence of community physicians on such committees would help to instill more public confidence in the choices and opinions of the admissions committees, since many people, students included, feel there is sometimes unfair partiality. Certainly, community medicine exposes physicians to a multitude of experi-

Doctor De Witt

Doctor Williams

ences that produce principles and disciplines to life and practice, valuable to selective procedures, not always available from within the "ivory towers." I think student acceptance of this concept would be as great as was the innovation by some schools of using students as part of a selection committee. I am sure the applicant would feel a greater sense of security knowing that one or two of perhaps seven, for example, of the interviewers were men practicing medicine daily in a community situation. The community physician again, would be in an excellent position to seek out and interpret the role the applicant expects to play as a physician.

Last but not least, it might well be that the community physician could at some point serve in screening applicants in various outlying areas or at various colleges, for as the enrollment of medical schools gradually increases the number of applicants will increase. This could ease the load of the selection committee's job which would become greater and more difficult each year. As a physician practicing family medicine or "primary care" medicine, I certainly advocate strongly the consideration that community physicians be integrated into student selection procedures of the medical schools in our state.

Adam C. McClay, MD
Traverse City

Some aspects of the problems surrounding the selection of medical students are self evident. There is the fortunate fact that the American public still is in the enviable position of having many of its youth competing for the job of serving its health needs. This produces the necessity for a simple numerical reduction to reduce the army of applicants to the relatively small corps of first year medical students. In this situation the medical profession is in the position of being able to name almost any criteria for selection from academic excellence to shoe size.

Deciding upon the proper selection criteria brings to light a stickier problem, however. I understand that no foolproof method has evolved for selecting from a group of college students those who will survive medical school and then go out into the field and serve the public well as medical practitioners. If such a system existed this discussion and the question posed above would be pointless. I think we can conclude therefore that the selection of medical students does present problems.

I subscribe generally to the notion that the best solutions are usually found close to the source of the problem and among those working with the problem. Who then is closest to this problem? Are they those in academic medicine involved in training the student or are they those physicians in the community who observe the working of the academic product. It would appear that both have their own unique vantage point.

With the cost of training facilities and with the need for physicians being what they are, every good source of input to insure an effective selection mechanism should be utilized including the community physician.

Undoubtedly such an arrangement would raise the spectre of nepotism. However, all systems depend for successful operation upon the integrity of those administering them. In addition it is my understanding that the number of physicians' offspring applying for admission to medical school is declining rapidly.

The details of incorporating community physicians into the medical schools' student selection committees might be difficult to work out. Following the foregoing reasoning, however, I think the idea has merit and deserves serious exploration.

Joshua S. Williams, MD
Detroit

If one considers the academic community as separate and distinct from the general off-campus community, then one can assume that the two communities have developed some differing perceptions and attitudes toward such matters as the qualities and characteristics of the ideal candidate for the medical profession.

Both sides would, no doubt, concede the primary importance of scholastic ability.

However, over and above scholarship and the ability to acquire and retain scientific information in an organized manner, there must be some evidence of the ability to pragmatically apply this knowledge. There should be an effort made to ascertain the applicant's commitment to serve people and evidence that in this service he or she could find purposeful living. Whether average or superior in intellect, the candidate should be intolerant of mediocrity in his own performance regardless of the task's degree of difficulty. Yet, there must be sufficient humility to recognize the possibility always of human error. Evidence of the ability to communicate and empathize with people is important.

Hopefully, many of the most gifted candidates will ultimately find fulfillment in research, teaching, and developing techniques to defeat the most challenging diseases among their fellowmen. A majority will be expected to fall among the ranks of medical colleagues who live and work in the non-academic community. These are the physicians who devote time to civic affairs, churches, politics, and organized medicine in addition to caring for their patients. These are the physicians toward whom most of the heralded plans to change the health care system of this nation are directed.

Certainly, that segment of the medical profession which has such an awesome responsibility to people and represents the bulk of the profession should be represented on the committees which will select the additions and replacements in its ranks. Which among the two communities, academic or non-academic, is better able to assess the qualities in the candidate which will be most beneficial to the physician's endeavors after private practice begins? Well, of course, I gave my answer in the beginning.

Thomas R. Busard, MD
Muskegon

Doctor Busard

I believe much can be gained in the medical student selection process, if local doctors could be involved in such selection. Since a selection committee could not possibly have a doctor from each community on it, perhaps a member could be chosen to cover a region. Then, when an applicant from Podunk Center or Detroit applied, the regional member could inquire of the local medical society about such applicant. The medical society could then advise the applicant, by form letter probably, of the inquiry, and obtain from the applicant additional information. The mechanics could easily be made workable. There could be benefits to the students, the school, the local medical society, and to society in general.

The student could benefit because not only would the obvious misfit be quickly eliminated, to his own benefit, but also because the medical student would early-on begin his association with real doctors. A serious student's interest in medicine could be easily documented, and might counterbalance mediocre grades which he may have earned in days before he chose medicine as a career, and before he was inspired to work for higher grades. It could be the beginning of an association with local doctors which might continue throughout his training, giving him a more nearly honest and realistic view of medicine and the doctors who practice it. The social attitudes of medical students have historically changed drastically after they get into practice, and any association with practicing physicians would help to establish realistic social attitudes earlier. In addition, if such associations were maintained during medical school they would serve as an easy entree for extern and clerkship programs, and possibly intern and residency programs.

The school would benefit by getting students with documented interest in medicine. In addition, the school will have stronger ties with real doctors through such a program. As most practicing physicians will note, the schools need all the contact with the real world that they can get. Through such contacts with local physicians and local medical societies, schools may be spurred to have more practical curricula, may produce teachers as well as students who have more realistic social attitudes. Who knows, it might even be a slight counter balance to the idiotic publish-or-perish method of choosing ivory tower teachers. Such a continuing program might rekindle the interest of the local doctors in the school, if they could see results from such interest.

The local medical societies would benefit from such a program through continuing relationship with the schools, which the student would bridge. All of us benefit by keeping abreast of what's new, and this will be one additional information source. But more than that, we can continue to be inspired by contacts with medical students, for they are indeed a spur to keep up. We can, through continuing relationships with such students, have a constant source of new doctors for our communities, for if a student has friends in a community he will be more likely to return.

I'm for the program! When does it start?

Statewide plan for emergency care being developed

A national problem—the emergency care of the acutely ill and injured—is receiving top priority attention in Michigan from statewide groups organizing under the direction of the Michigan Emergency Services Health (MESH) Council.

The 40 organizations with representatives on the MESH Council have formed into eight task forces to begin work on a state health plan for emergency health services.

The Michigan State Health Department Planning division will provide staff members to develop the plan, according to Charles F. Frey, MD, director of surgery at Wayne County General Hospital and MESH Council chairman.

"We hope to coordinate and improve the delivery of emergency health services and reduce the cost of emergency care to the people of the state," says Doctor Frey. "It's generally recognized that acute illness and injury are the neglected 'diseases' of modern society."

The MESH Council, the driving force in establishing a state plan, specifically plans to improve ambulance services and the training of ambulance operators, and also improve the communications between hospitals and ambulances.

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- ☐ also relieves fullness and bloating
- ☐ non-constipating

LIQUID MYLANTA® TABLETS

aluminum and magnesium hydroxides with simethicone

STUART PHARMACEUTICALS | Division of ICI America Inc. | Wilmington, Del. 19899 | Pasadena, Calif. 91109

If you've seen one, have you really seen them all?

The following patient profiles represent typical clinical situations, but do not necessarily represent actual cases.

Age 21, short, mammose, with normal menses, some acne. Was put on prenuptial regimen of 50-mcg.-estrogen/moderate-progestogen O.C. for two months. Now has increased acne.

Indicates metabolic production of androgen or relative estrogen deficiency.

1st choice: Switch to a 100-mcg.-estrogen combination (such as **Enovid-E*** or a sequential).

Age 25, average frame, poor complexion. No problem with menses, normal para 1. On a low-estrogen/high-progestogen O.C. for two years. Now complains of scanty flow, decreased libido, depression.

Indicates probable buildup of progestogen-related side effects.

1st choice: Switch to a center-spectrum O.C. with more estrogen, less progestational activity (such as **Ovulen***).

Age 19, small breasts, minor hirsutism, oily hair and skin. History of metrorrhagia, skipped or scanty menses. New user.

Indicates androgenic excess or estrogen deficiency (fertility is suspect).

1st choice: An estrogen-dominant O.C. (such as **Enovid-E***).

Age 22, previously normal menses with occasional menorrhagia. Now on a sequential O.C. for four month Complains of heavy flow, occasional intracyclic bleeding, edema, tender swollen breasts.

Indicates estrogen excess.

1st choice: Switch to a combination 50-mcg.-estrogen O.C. (such as **Demulen***).

Unmasked, physiologically and anatomically, they're not all the same. A basic difference lies in their hormone profiles. One may secrete too much estrogen, another not enough…or perhaps too much androgen; the vast majority would fit somewhere into the broad center spectrum.

Although the profiles described below may not be completely predictive, in optimal O.C. selection, the estrogen-progestogen activity ratio should be carefully matched to the patient profile. Searle offers you O.C.s in a range not only suitable for your patients in the balanced center spectrum, but also adaptable to the patient with another type of hormone profile.

Oral contraceptives are complex medications. Among the commonly reported adverse reactions are: intracycle bleeding, fluid retention, tender or swollen breasts, exacerbation of acne condition, changes in libido, amenorrhea while on medication and upon discontinuance, nausea, leg cramps, headaches, weight gain. Therefore, after reference to the prescribing information, oral contraceptives should be prescribed with care.

*Note: In some patients any level of exogenous estrogen or progestogen may produce symptoms of excess hormone activity.

Age 25, tall, slender, athletic, with flat chest. On a progestogen-dominant 50-mcg.-estrogen O.C. Has recurrent trichomoniasis and Monilia.

Indicates estrogen deficiency and excess of progestogen in current O.C.

1st choice: Switch to a combination pill with 100 mcg. estrogen and less progestational activity (such as **Enovid-E*** or **Ovulen*** or a sequential).

Age 23, "Miss America" figure, previously normal menses, healthy skin and hair. On a 50-mcg.-estrogen pill for four months. Complains of intracyclic bleeding.

Indicates probable need for more estrogen.

1st choice: Switch to a center-spectrum O.C. with more estrogen and moderate progestogen dominance (such as **Ovulen***)

Age 21, college senior, average build. On highly progestogen-dominant/low-dose-estrogen O.C. for six months. Now complains of amenorrhea, between-cycle headaches, weight gain.

Indicates probable progestogen excess.

1st choice: Switch to a center-spectrum pill (such as **Ovulen***).

Age 27, slightly overweight, multiparous. Nausea with all three pregnancies and with a sequential O.C. three years ago. Has premenstrual fluid retention and leg cramps.

Indicates probable excess of estrogen.

1st choice: A 50-mcg.-estrogen/progestogen-dominant pill (such as **Demulen***).

Ovulen® a balanced center-spectrum O.C. for most

Each white tablet contains ethynodiol diacetate 1 mg./mestranol 0.1 mg.

Demulen® a moderately progestogen-dominant O.C. for many

Each white tablet contains ethynodiol diacetate 1 mg./ethinyl estradiol 50 mcg.

Each pink tablet in Ovulen-28® and Demulen®-28 is a placebo, containing no active ingredients.

Both Ovulen and Demulen are available in 21- and 28-pill schedules.

SEARLE Products of SEARLE & CO.
San Juan, Puerto Rico 00936

Enovid-E® a moderately estrogen-dominant O.C. for some

Each tablet contains norethynodrel 2.5 mg./mestranol 0.1 mg.

SEARLE Product of Searle Laboratories Division
G.D. SEARLE & CO.
P.O. Box 5110, Chicago, Illinois 60680
Where "The Pill" Began

For a brief summary of prescribing information, please see next page.

a family of O.C. products to help you match the right pill to the right patient

Ovulen®

Each white tablet contains
ethynodiol diacetate 1 mg./mestranol 0.1 mg.

Demulen®

Each white tablet contains
ethynodiol diacetate 1 mg./ethinyl estradiol 50 mcg.

Each pink tablet in Ovulen-28® and Demulen®-28 is a placebo, containing no active ingredients.

Actions—Ovulen and Demulen act to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Ovulen and Demulen depress the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Special note—Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision.

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication—Ovulen and Demulen are indicated for oral contraception.

Contraindications—Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia and undiagnosed abnormal genital bleeding.

Warnings—The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality conducted in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism, and cerebral thrombosis and embolism and the use of oral contraceptives. There have been three principal studies in Britain[1-3] leading to this conclusion, and one[4] in this country. The estimate of the relative risk of thromboembolism in the study by Vessey and Doll[3] was about sevenfold, while Sartwell and associates[4] in the United States found a relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions medication should be withdrawn.

Since the safety of Ovulen and Demulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Ovulen or Demulen. Therefore, if such tests are abnormal in a patient taking Ovulen or Demulen, it is recommended that they be repeated after the drug has been withdrawn for two months. Under the influence of progestogen-estrogen preparations preexisting uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Ovulen or Demulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Ovulen or Demulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Ovulen or Demulen may mask the onset of the climacteric. The pathologist should be advised of Ovulen or Demulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives—A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function: increased sulfobromophthalein retention and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T^3 uptake values; metyrapone test and pregnanediol determination.

References: 1. Royal College of General Practitioners: Oral Contraception and Thrombo-Embolic Disease, J. Coll. Gen. Pract. *13*:267-279 (May) 1967. **2.** Inman, W. H. W., and Vessey, M. P.: Investigation of Deaths from Pulmonary, Coronary, and Cerebral Thrombosis and Embolism in Women of Child-Bearing Age, Brit. Med. J. *2*:193-199 (April 27) 1968. **3.** Vessey, M. P., and Doll, R.: Investigation of Relation Between Use of Oral Contraceptives and Thromboembolic Disease. A Further Report, Brit. Med. J. *2*:651-657 (June 14) 1969. **4.** Sartwell, P. E.; Masi, A. T.; Arthes, F. G.; Greene, G. R., and Smith, H. E.: Thromboembolism and Oral Contraceptives: An Epidemiologic Case-Control Study, Amer. J. Epidem. *90*:365-380 (Nov.) 1969.

SEARLE

Products of SEARLE & CO
San Juan, Puerto Rico 00936

Enovid-E®

norethynodrel 2.5 mg./mestranol 0.1 mg.

Actions—Enovid-E acts to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Enovid-E depresses the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Indication—Enovid-E is indicated for oral contraception.

The *Special Note, Contraindications, Warnings, Precautions* and *Adverse Reactions* listed above for Ovulen and Demulen are applicable to Enovid-E and should be observed when prescribing Enovid-E.

Enovid-E®

brand of norethynodrel with mestranol

SEARLE

Product of Searle Laboratories Division
G. D. SEARLE & CO.
P.O. Box 5110, Chicago, Illinois 60680
Where "The Pill" Began

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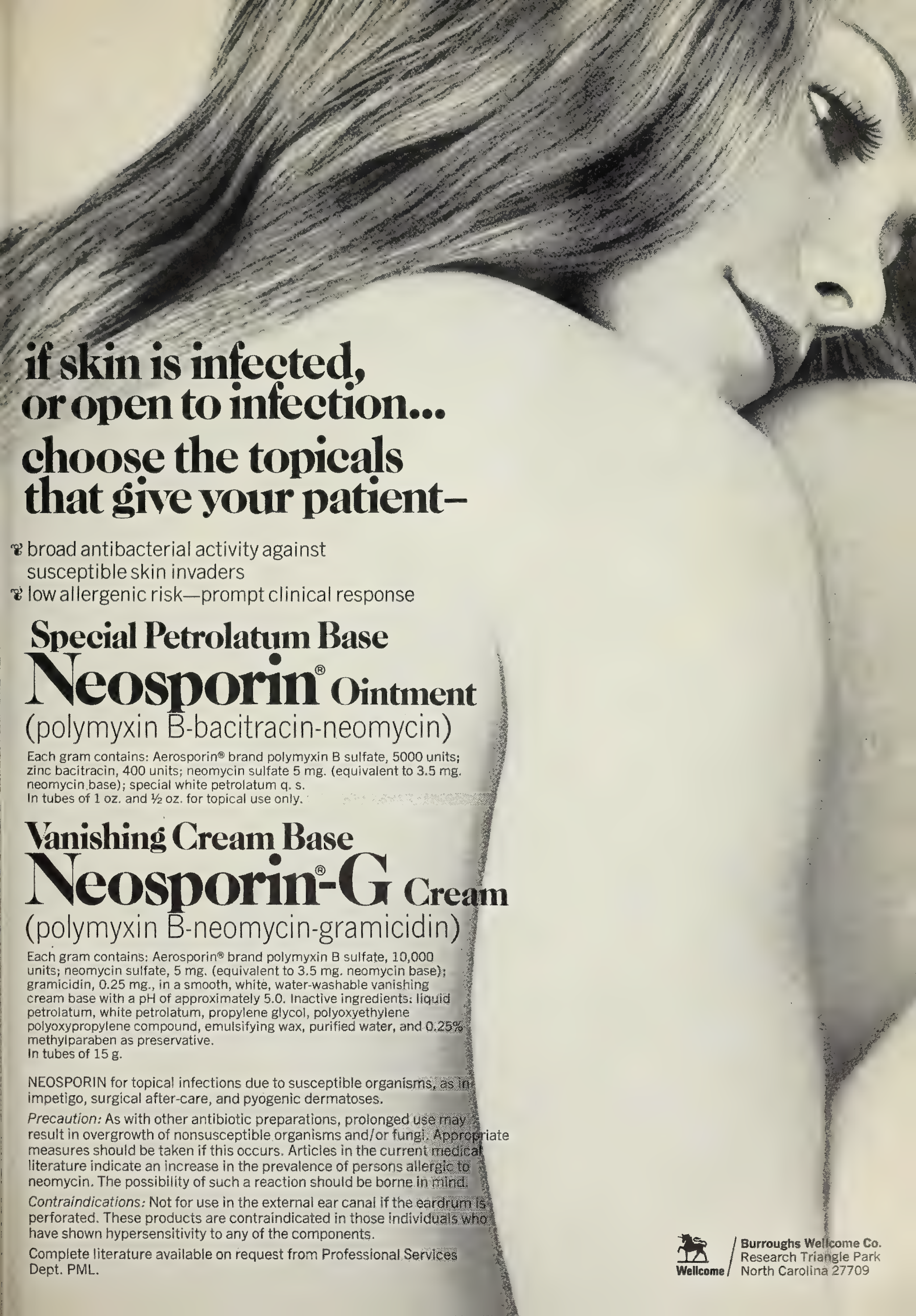


if skin is infected, or open to infection...

choose the topicals that give your patient–

- broad antibacterial activity against susceptible skin invaders
- low allergenic risk—prompt clinical response

Special Petrolatum Base

Neosporin® Ointment

(polymyxin B-bacitracin-neomycin)

Each gram contains: Aerosporin® brand polymyxin B sulfate, 5000 units; zinc bacitracin, 400 units; neomycin sulfate 5 mg. (equivalent to 3.5 mg. neomycin base); special white petrolatum q. s.
In tubes of 1 oz. and ½ oz. for topical use only.

Vanishing Cream Base

Neosporin®-G Cream

(polymyxin B-neomycin-gramicidin)

Each gram contains: Aerosporin® brand polymyxin B sulfate, 10,000 units; neomycin sulfate, 5 mg. (equivalent to 3.5 mg. neomycin base); gramicidin, 0.25 mg., in a smooth, white, water-washable vanishing cream base with a pH of approximately 5.0. Inactive ingredients: liquid petrolatum, white petrolatum, propylene glycol, polyoxyethylene polyoxypropylene compound, emulsifying wax, purified water, and 0.25% methylparaben as preservative.
In tubes of 15 g.

NEOSPORIN for topical infections due to susceptible organisms, as in impetigo, surgical after-care, and pyogenic dermatoses.

Precaution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Contraindications: Not for use in the external ear canal if the eardrum is perforated. These products are contraindicated in those individuals who have shown hypersensitivity to any of the components.

Complete literature available on request from Professional Services Dept. PML.

Wellcome / **Burroughs Wellcome Co.**
Research Triangle Park
North Carolina 27709

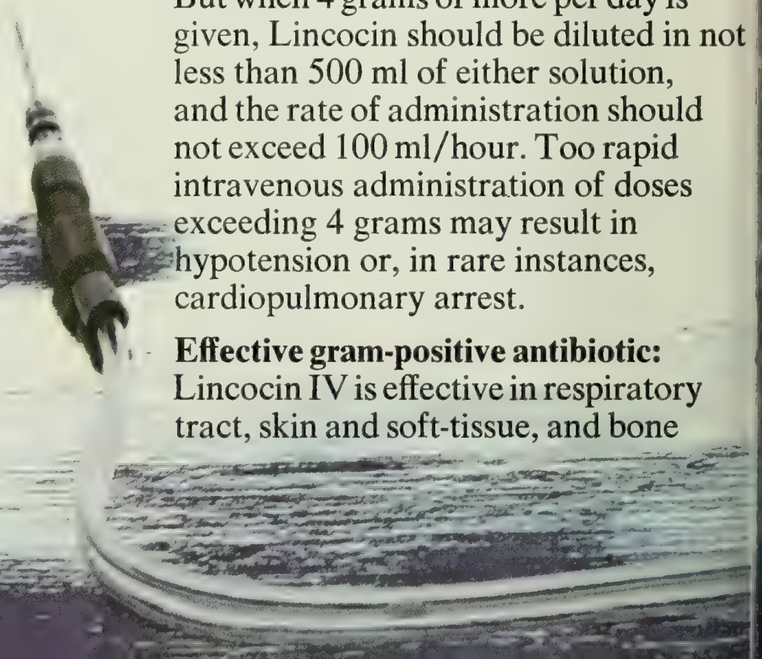
When you select this familiar antibiotic for IV infusion you have available a broad dosage range that hospitalized patients may need.

Intravenous Lincocin (lincomycin hydrochloride, Upjohn), with its 1.2 to 8 grams/day dosage range, covers many serious and even life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. Lincocin IV therefore can be as useful in your hospitalized patients as its IM use has proved to be in your office patients. As with all antibiotics, *in vitro* susceptibility studies should be performed.

1.2 to 8 grams/day IV dosage range: Most hospitalized patients with uncomplicated pneumonias respond satisfactorily to 1.2 to 1.8 grams/day of Lincocin IV. These doses may have to be increased for more serious infections. In life-threatening situations as much as 8 grams/day has been administered intravenously to adults.

In usual IV doses, Lincocin (lincomycin hydrochloride, Upjohn) should be diluted in 250 ml or more of normal saline solution or 5% glucose in water. But when 4 grams or more per day is given, Lincocin should be diluted in not less than 500 ml of either solution, and the rate of administration should not exceed 100 ml/hour. Too rapid intravenous administration of doses exceeding 4 grams may result in hypotension or, in rare instances, cardiopulmonary arrest.

Effective gram-positive antibiotic: Lincocin IV is effective in respiratory tract, skin and soft-tissue, and bone



infections caused by susceptible strains of pneumococci, streptococci, and staphylococci, including penicillin-resistant strains. Staphylococcal strains resistant to Lincocin (lincomycin hydrochloride, Upjohn) have been recovered. Before initiating therapy, culture and susceptibility studies should be performed. Lincocin has proved valuable in treating patients hypersensitive to penicillin or cephalosporins, since Lincocin does not share antigenicity with these compounds. However, hypersensitivity reactions have been reported, some of these in patients known to be sensitive to penicillin.

Well tolerated at infusion site: Lincocin intravenous infusions have not produced local irritation or phlebitis, when given as recommended. Lincocin is usually well tolerated in patients who are hypersensitive to other drugs. Nevertheless, Lincocin should be used cautiously in patients with asthma or significant allergies.

In patients with impaired renal function, the recommended dose of Lincocin should be reduced to 25–30% of the dose for patients with normal kidney function. Its safety in pregnant patients and in infants less than one month of age has not been established.

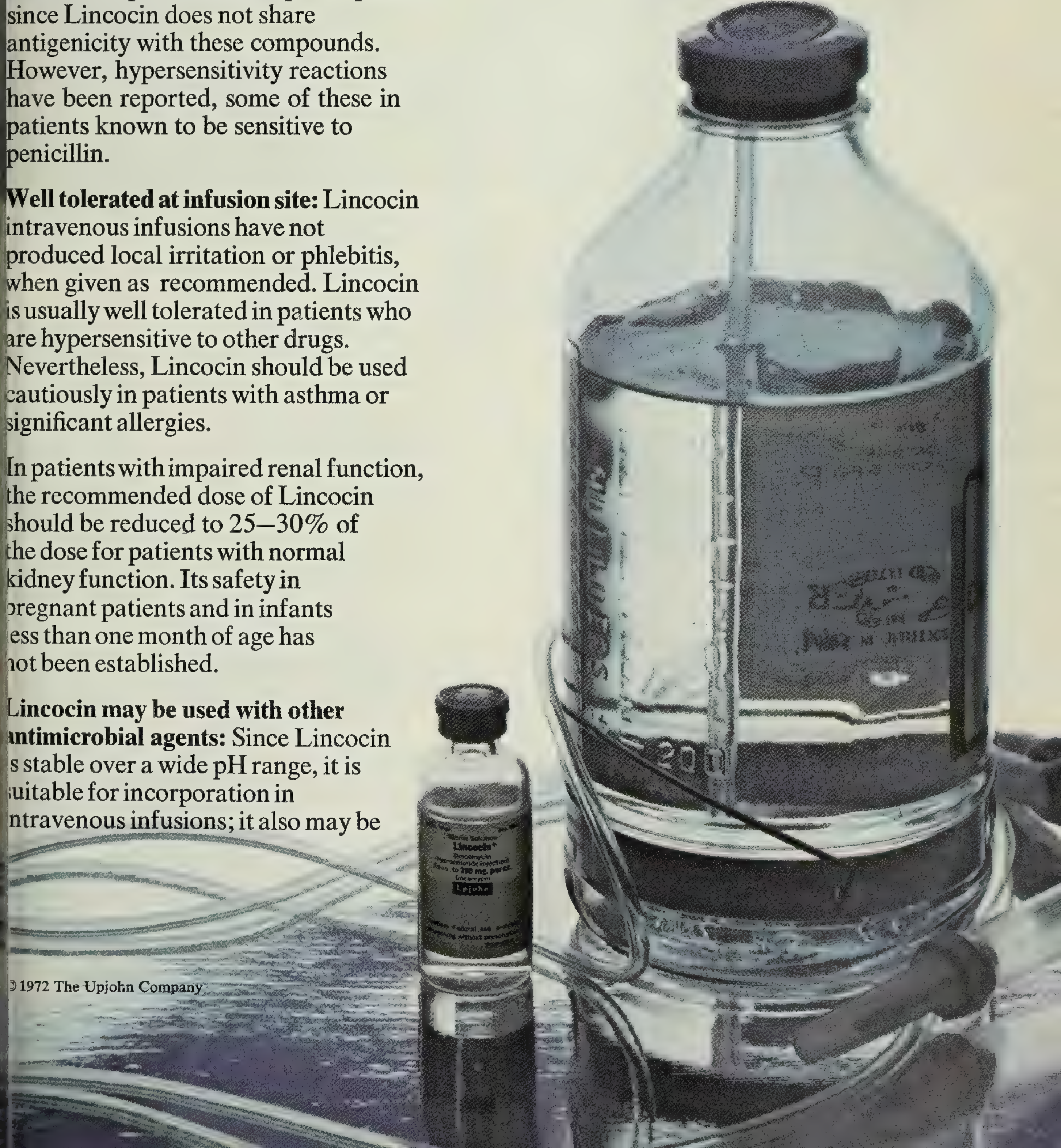
Lincocin may be used with other antimicrobial agents: Since Lincocin is stable over a wide pH range, it is suitable for incorporation in intravenous infusions; it also may be administered concomitantly with other antimicrobial agents when indicated. However, Lincocin should not be used with erythromycin, as *in vitro* antagonism has been reported.

Lincocin®

Sterile Solution (300 mg per ml)

(lincomycin hydrochloride, Upjohn)

For further prescribing information, please see following page.



© 1972 The Upjohn Company

Sterile Solution (300 mg. per ml.)

Lincocin®

(lincomycin hydrochloride, Upjohn)

Up to 8 grams per day by IV infusion for hospitalized patients with life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. As with all antibiotics, *in vitro* susceptibility studies should be performed.

Each preparation contains:	Lincomycin hydrochloride monohydrate equivalent to lincomycin base
250 mg Pediatric Capsule	250 mg
500 mg Capsule	500 mg
*Sterile Solution per 1 ml	300 mg
Syrup per 5 ml	250 mg

*Contains also: Benzyl Alcohol 9 mg; and, Water for Injection—q.s.

Lincocin (lincomycin hydrochloride) is indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed. Cross resistance has not been demonstrated with penicillin, ampicillin, cephalosporins, chloramphenicol or the tetracyclines. Some cross resistance with erythromycin has been reported. Studies indicate that Lincocin does not share antigenicity with penicillin compounds.

CONTRAINDICATIONS: History of prior hypersensitivity to lincomycin or clindamycin. Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: *CASES OF SEVERE AND PERSISTENT DIARRHEA HAVE BEEN REPORTED AND HAVE AT TIMES NECESSITATED DISCONTINUANCE OF THE DRUG. THIS DIARRHEA HAS BEEN OCCASIONALLY ASSOCIATED WITH BLOOD AND MUCUS IN THE STOOLS AND HAS AT TIMES RESULTED IN AN ACUTE COLITIS. THIS SIDE EFFECT USUALLY HAS BEEN ASSOCIATED WITH THE ORAL DOSAGE FORM BUT OCCASIONALLY HAS BEEN REPORTED FOLLOWING PARENTERAL THERAPY.* A careful inquiry should be made concerning previous sensitivities to drugs or other allergens. Safety for use in pregnancy has not been established and Lincocin (lincomycin hydrochloride) is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infections for 10 days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihistamines available for emergency treatment *Skin and mucous membranes*—Skin rashes urticaria, vaginitis, and rare instances of exfoliative and vesiculobullous dermatitis have been reported. *Liver*—Although no direct relationship to liver dysfunction is established jaundice and abnormal liver function tests (particularly serum transaminase) have been observed in a few instances. *Cardiovascular*—Instances of hypotension following parenteral administration have been reported particularly after too rapid IV administration. Rare instances of cardiopulmonary arrest have been reported after too rapid IV administration. If 4.0 grams or more administered IV, dilute in 500 ml of fluid and administer no faster than 100 ml per hour *Special senses*—Tinnitus and vertigo have been reported occasionally. *Local reactions*—Excellent local tolerance demonstrated to intramuscularly administered Lincocin (lincomycin hydrochloride). Reports of pain following injection have been infrequent Intravenous administration of Lincocin in 250 to 500 ml of 5% glucose in distilled water or normal saline has produced no local irritation or phlebitis.

HOW SUPPLIED: *250 mg* and *500 mg* Capsules—bottles of 24 and 100. *Sterile Solution, 300 mg per ml*—2 and 10 ml vial and 2 ml syringe. *Syrup, 250 mg per 5 m*—60 ml and pint bottles.

For additional product information, consult the package insert or see your Upjohn representative.

MED B-6-S (KZL-7) JA71-1631

The Upjohn Company
Kalamazoo, Michigan 49001

Upjohn

BASIC SCIENCE ACT REPEALED—On hand for Governor Milliken's signing of House Bill 5883—the repeal of the Basic Science Act—June 16, were, left to right, Harvey Gendler, MD, Doctor-of-the-Week, who represented the 66 doctors-of-the-week who have worked against basic science examinations over the past three years; Senator Philip Pittenger, who introduced the repealer three times in the Legislature and this year offered the bill to the Senate, then supported the House bill; Rep. William Jowett, Port Huron, co-sponsor of HB5883 and a veteran campaigner against the examination; Rep. Joseph Snyder, St. Clair Shores, chief sponsor of the bill who urged and obtained labor support of the repealer; Franklin Troost, MD, Holt, who started the action to repeal basic sciences 20 years ago when he served on the Board of Registration in Medicine; and Kenneth H. Johnson, MD, Lansing, secretary of MSMS, and chairman of MSMS Legal Affairs Committee which directed this year's successful legislative effort.

Private practices—$40,000 minimum collections guaranteed first year, payable monthly. Not a loan. Need general practitioners, internists, OB-GYNs, anesthesiologists, and orthopedists in many states. Practices available for 1972-73-74. Not an employment agency. No cost to physician to investigate practice. Write or call: **Sanford Smith, Director of Physician Planning, Hospital Affiliates, Incorporated, P.O. Box 9836, Houston, Tex 77015. 713/453-6324.**

MSMS President Sidney Adler, MD, conferred with Michigan Governor William G. Milliken following the ceremony when the governor signed the Basic Science Act repeal bill.

Welcome

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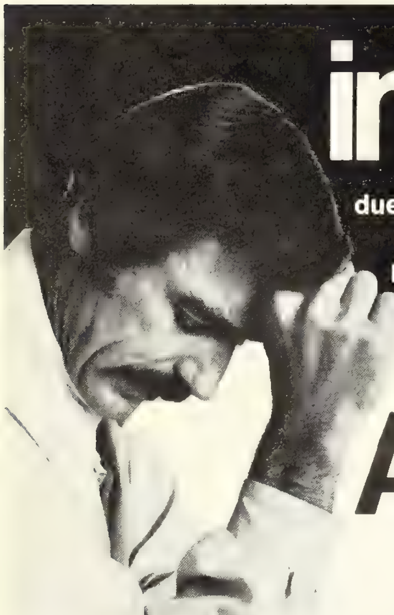
Flint 48502



The treatment of
impotence
due to androgenic deficiency in the American male.
The concept of chemotherapy plus the physician's psychological support is confirmed as effective therapy.

NEW CLINICAL STUDY

The Treatment of Impotence with Methyltestosterone Thyroid (100 patients—Double Blind Study)
T. Jakobovits
Fertility and Sterility, January 1970
Official Journal of the American Fertility Society

Android®
(thyroid-androgen) tablets

Double-Blind Study and Type of Patient:
100 patients suffering from impotence. Of the patients receiving the active medication (Android) a favourable response was seen in 78%. This compares with 40% on placebo. Although psychotherapy is indicated in patients suffering from functional impotence the concomitant role of chemotherapy (Android) cannot be disputed.

Choice of 4 strengths:

Android

Each yellow tablet contains:
Methyl Testosterone ..2.5 mg.
Thyroid Ext. (1/6 gr.) ..10 mg.
Glutamic Acid ....50 mg.
Thiamine HCL ....10 mg.
Dose: 1 tablet 3 times daily.
Available:
Bottles of 100, 500, 1000.

Android-HP
HIGH POTENCY
Each red tablet contains:
Methyl Testosterone ..5.0 mg.
Thyroid Ext. (½ gr.) ...30 mg.
Glutamic Acid ....50 mg.
Thiamine HCL ....10 mg.
Dose: 1 tablet 3 times daily.
Available:
Bottles of 100, 500, 1000.

Android-X
EXTRA HIGH POTENCY
Each orange tablet contains:
Methyl Testosterone .12.5 mg.
Thyroid Ext. (1 gr.) ....64 mg.
Glutamic Acid ....50 mg.
Thiamine HCL ....10 mg.
Dose: 1 or 2 tablets daily.
Available:
Bottles of 60, 500.

Android-Plus
WITH HIGH POTENCY
B-COMPLEX AND VITAMIN C
Each white tablet contains:
Methyl Testosterone ..2.5 mg.
Thyroid Ext. (¼ gr.) ...15 mg.
Ascorbic Acid (Vit. C) .250 mg.
Thiamine HCL ....25 mg.
Glutamic Acid ....100 mg.
Pyridoxine HCL ....5 mg.
Niacinamide ....75 mg.
Calcium Pantothenate .10 mg.
Vitamin B-12 ....2.5 mcg.
Riboflavin ....5 mg.
Dose: 2 tablets daily.
Available: Bottles of 60, 500.

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Contraindications: Android is contraindicated in patients with prostatic carcinoma, severe cardiorenal disease and severe persistent hypercalcemia, coronary heart disease and hyperthyroidism. Occasional cases of jaundice with plugging biliary canaliculi have occurred with average doses of Methyl Testosterone. Thyroid is not to be used in heart disease and hypertension

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References: 1. **Montesano, P., and Evangelista, I.** Methyltestosterone-thyroid treatment of sexual impotence. Clin Med 12:69, 1966. 2. **Dublin, M. F.** Treatment of impotence with methyltestosterone-thyroid compound. West Med 5:67, 1964. 3. **Titeff, A. S.** Methyltestosterone-thyroid in treating impotence. Gen Prac 25:6, 1962. 4. **Hellman, L., Bradlow, H. L., Zumoff, B., Fukushima, D. K., and Gallagher, T. F.** Thyroid-androgen interrelations and the hypocholesteremic effect of androsterone. J Clin Endocr 19:936, 1959. 5. **Farris, E. J., and Colton, S. W.** Effects of L-thyroxine and liothyronine on spermatogenesis. J Urol 79·863, 1958. 6. **Osol, A., and Farrar, G. E.** United States Dispensatory (ed. 25). Lippincott, Philadelphia, 1955, p. 1432. 7. **Wershub, L. P.** Sexual Impotence in the Male. Thomas, Springfield, Ill., 1959, pp. 79-99.

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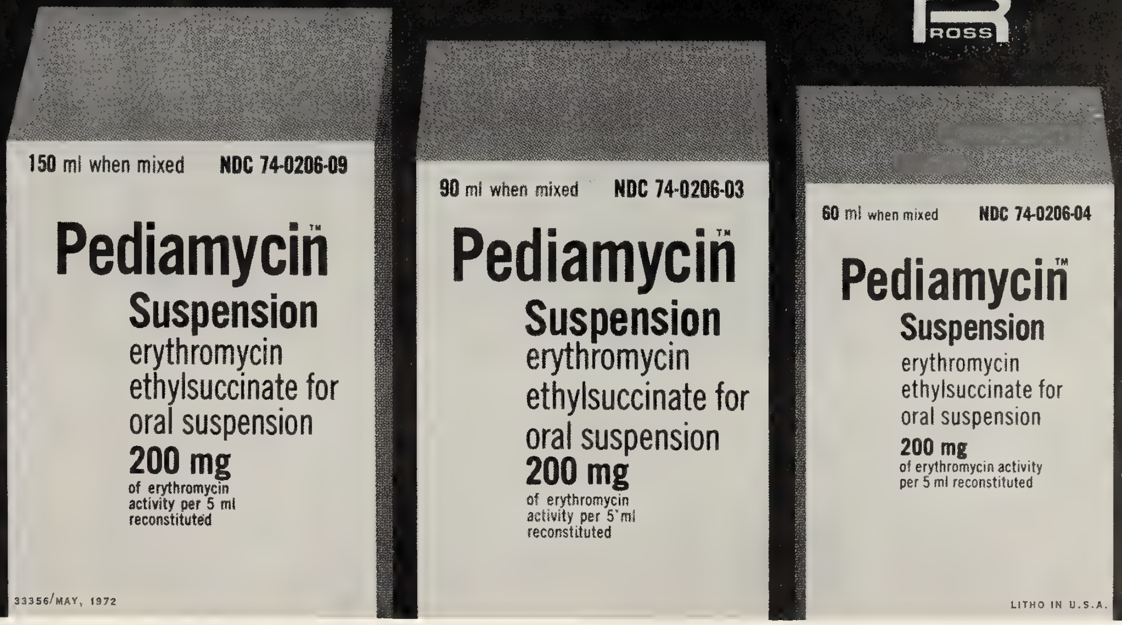
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In memoriam

John W. Brink, MD
Benton Harbor

John W. Brink, MD, Benton Harbor-St. Joseph orthopedic surgeon, died June 9 at the age of 43.

Doctor Brink, a graduate of the University of Michigan Medical School, was a fellow of the American Academy of Orthopedic Surgeons. He served as a surgeon in the U.S. Navy from 1956-58.

William P. Chester, MD
Grosse Pointe

William P. Chester, MD, Detroit-area internist, died May 29 at the age of 76. A graduate of Wayne State University School of Medicine, he was affiliated with Providence and St. John hospitals in Detroit.

Doctor Chester was past president of the National Federation of Catholic Physicians, and was a member of the American College of Chest Physicians, the American Diabetic Society, American Trudeau Society and American Geriatric Society.

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Clarence J. DeBoer, MD
Grandville

A Grandville surgeon for nearly 20 years, Clarence J. DeBoer, MD, died June 13 at the age of 57.

Doctor DeBoer was graduated from the University of Michigan Medical School and served with the U.S. Army in England, North Africa and the U.S. between 1942 and 1946. He was on the staffs of St. Mary's and Ferguson-Droste-Ferguson hospitals in Grand Rapids.

Doctor DeBoer was acting president of the Executive Board of the National Union of Christian Schools, had been a Grandville Christian School board member 12 years and was vice president of the Calvin Christian School Association in Grand Rapids. He was a fellow of the American College of Surgeons.

L. D. Funk, MD
Athens

L. D. Funk, MD, Athens general practitioner for 55 years until his retirement in 1971, died June 19 at the age of 81. Doctor Funk received the 50-year award from MSMS in 1966 and also was honored that year by his alma mater, the University of Michigan Medical School.

Doctor Funk was named "Athens Man of the Year" in 1966, and had been a long-time member of the Athens Board of Education. He was a former semi-professional baseball player, owned and raced trotting horses and served as a lay minister in the West Leroy Church. He also served the Haven of Rest Rescue Mission in Battle Creek and had served a one-month mission tour of hospitals in Rhodesia, South Africa and the Belgian Congo in 1968.

William E. Hoffer, MD
Lansing

A recipient of the MSMS 50-year award in 1969, William Ervin Hoffer, MD, died July 1 at the age of 85.

Doctor Hoffer, a graduate of the Eclectic Medical College of Ohio, also held the LLB degree from the

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University of Dayton and was a member of the Ohio and Federal Bars. He first practiced medicine in Ohio, moved to Charlotte in 1948 and then to Lansing in 1946. He had served as physician for the Lansing Golden Gloves tournaments.

A generalist with special attention to neurology and psychiatry, Doctor Hoffer was a member of the American Academies of psychosomatic medicine and family physicians, and the American Society of Clinical Hypnosis.

Otto F. Jens, MD
Standish

Standish-area family practitioner Otto Frederick Jens, MD, died May 19 at the age of 77. He was affiliated with Mercy and General hospitals in Bay City.

Doctor Jens was graduated from the Detroit College of Medicine and practiced in Rose City for two years, then in Essexville from 1933 to 1968. He was former president of the Bay-Arenac-Iosco counties Medical Society and had served with the U.S. Navy hospital corps in Edinburgh, Scotland, during World War I.

Kenneth C. Ling, MD
Hemlock

Kenneth Charles Ling, MD, Hemlock family physician for 26 years, died June 13 at the age of 46. He was a trustee of the Hemlock State Bank and served 14 years with the local board of education.

A graduate of the Wayne State University School of Medicine, Doctor Ling was affiliated with St. Luke's, St. Mary's and Saginaw General hospitals in Saginaw. He had served three years in the Navy Medical Corps.

Angus L. McDonald, MD
Grosse Pointe Farms

Angus Lawrence McDonald, MD, Detroit, internist for 50 years, died June 20 at the age of 79. He was a graduate of McGill University School of Medicine and was affiliated with St. Joseph Mercy Hospital, Detroit.

Dean W. Smith, MD
Jackson

Dean Wright Smith, MD, Jackson EENT specialist, died May 28 at the age of 61. Doctor Smith was past treasurer of the Jackson County Medical Society and was affiliated with Mercy and Foote hospitals in Jackson.

A graduate of the New York Homeopathic College, Doctor Smith served as a family physician until 1944, when he took graduate studies. He was a member of the Michigan Triological Society and was past president of the Jackson County Historical Society and former trustee of the Ella Sharp Museum there.

Louis D. Stern, MD
Detroit

Past head of the Harper Hospital hematology department, Louis D. Stern, MD, died June 11 at the age of 80. He was on the staff of Holy Cross, Deaconess and Detroit General hospitals.

A graduate of the University of Michigan Medical School, Doctor Stern was an internist. He was a World War I veteran.

Herbert O. Westervelt, MD
Benton Harbor

Retired Benton Harbor ophthalmologist, Herbert O. Westervelt, MD, died June 10 at the age of 81. Doctor Westervelt had practiced in Benton Harbor since 1921. He was a graduate of the University of Michigan Medical School.

Doctor Westervelt was past president of the Berrien County Medical Society, and former secretary of the MSMS ophthalmological and otolaryngological section. He was a member of the American Academy of Ophthalmology and Otolaryngology. He also was a former member of the Benton Harbor board of education.

Doctor Westervelt was affiliated with Benton Harbor Mercy Hospital and was a member of the Academy of Ophthalmology and Otolaryngology, and the Detroit Otolaryngological Society.

MSMS helping plan Sept. 19-20 workshop on drug abuse

Michigan State Medical Society has taken a leadership role with the State of Michigan and other community organizations to sponsor a Workshop on Alcoholism and Drug Abuse Sept. 19 and 20 in the Kellogg Center at Michigan State University.

Governor William G. Milliken will be among the keynote speakers. The workshop session will focus on four aspects of drug abuse problems: prevention and education, community coordination, detection and treatment. Physicians and other invited participants will attend workshop sessions with leaders of programs now in progress in Michigan. Emphasis will be on providing background and assistance for communities desiring to expand programs.

Richard Bates, MD, chairman of the MSMS Committee on Alcohol and Drug Dependency, is representing the society in planning for the workshop.

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Sound Off

AMA's hearings attract "church-goers"; here are suggestions

(Editor's Note - The AMA Council on Long Range Planning and priorities is conducting a series of regional meetings, sampling doctors' opinions. The following are the impressions of this program on the chairman of the MSMS Council, Brooker L. Masters, MD, Fremont.)

Doctor Masters

This message will discuss some of my views about the need for the American Medical Association to change and will suggest four specific problems.

The Council on Long-Range Planning and Development for the AMA is engaged in a sincere attempt to find out "what's wrong with the AMA," and to learn what physicians really want. Its members have invested much hard work and spent many hours studying medical problems, holding hearings, as they hope to bring the distilled concerns of the nation's physicians to the AMA Board of Trustees and House of Delegates.

After attending such a hearing at the AMA meeting in San Francisco, I personally feel that the effort will produce few results in terms of concrete change or blueprints for the future. I shall attempt to explain why I have arrived at this position.

Basically the hearings are composed of the "church goers." Those who testified in San Francisco were the involved men and women. With few exceptions the younger physicians were not present; the consuming public was not there, nor was it invited; and government, or other third-party payers, also were absent. We see what is so true of the AMA and the state organizations of our medical society: an organization listening and talking to itself.

In the case of the AMA it is easy to see how this might happen. In order for the AMA to respond to situations, decisions must be made by a relatively small group. But I do feel that some leaders seem to ignore the sound and visible signs of change which are sweeping our entire social order, including the practice of medicine.

The average age of the AMA delegate is 59.5 years. One hears considerable opposition to proposals for limiting terms of delegates. I wonder if this group of men and women really do consider the possibilities and the cost of change and progress?

Something needs to be done. What can it be? As vague as it may sound, there must be an immediate awareness on the part of every member of AMA (and of MSMS) that this is not 1847 but 1972! The organization does not need to be torn down, the AMA can still respond if its individual members . . . (if we) face up to some hard facts—

1. We need to recognize that the affluency of present-day physicians leads to some negative public reactions. The time-honored concept of the physician is of a humanitarian, respected and admired for devotion to his fellow-men, not that of a conspicuous consumer. Along with respect, physicians of the past were accorded a comfortable living, but now the median physician income is in the top five percentile. Much of our financial well-being has been not the result of our particular desires, but has just happened, due to prosperity, third-party payers and the endless demand of the public for medical care which is scientific and effective. But affluence may lead to avarice, and so we have the spectacle of the physician who seeks dollars and loses sight of humanitarian principles. We need to admit that this can happen to us.

2. We must listen to our medical students and young doctors. I believe they are saying that they want to go back to the original concept of the time-honored healer, the friend of man. The MD today has science in his hand, in addition to art, but this should serve only to increase his contribution to humanity.

3. We need to be honest. There is a shortage of doctors and there is maldistribution of the doctors we have. We must admit that the delivery of health care is spotty and unequal. In no way can the supply of physicians be increased fast enough to catch up with the demand, yet there must rapidly be developed an increased volume of health care. Therefore, the physician has got to change and perhaps

Scientific evaluation and practical use must prove HMO's worth

By George W. Slagle, MD
Battle Creek

(Doctor Slagle is chairman, Health Care Financing Committee, and former member, Council on Medical Service, of the AMA. The following is excerpted from his talk before the Michigan Hospital Association's recent Medical Staff-Trustee-Administrator Forum.)

Health care as it is maintained and delivered today may undergo sweeping changes under the impact of federal legislation. However, in the event of a national mandate, or even in the absence of it, there is a strong movement within the government to support with funds the organization and development of Health Maintenance Organizations as a proposed answer to all the problems that challenge the present delivery of health care. In fact, such funds have already been disbursed to those candidate organizations that have applied and met the requirements for this type of federal grant support. Huge sums of money are involved.

The authors of the HMO strategy intended the HMO as a vehicle for reducing the necessity for direct government intervention in the health field by introducing the benefits of competition. Where the third party, such as Blue Cross/Blue Shield, provides the financing for health care, the HMO provides not only the financing of health care but also the health care itself to its members. Since the HMO controls the mechanism of delivering the health care, unlike indemnity insurance, it is in a position to guarantee the availability, accessibility and continuity of care. Herein lies its strongest argument.

It is intended that an HMO deliver comprehensive services to its members.

Now if this idealistic organization were to indeed reach fruition and assume a major role in our society, even its rough blueprint clearly shows that it will have an impact upon every existent element within the health industry and will undoubtedly create the demand for new skills and supporting systems.

As we project the vision of an HMO within our midst, we naturally prefer the ideal—the answer to a problem—or a series of problems. I'm afraid the reality is not that simple. Can we afford an "experiment" on a national scale when it involves the welfare of everyone?

Would not a policy of "seeding" a few pilot HMO programs, each with a different set of variables, be a much more judicious way to proceed? Careful monitoring and evaluation will give solid evidence of performance "in the field" and a precise identification of that field so that adaptations and changes can be implemented and finally refined.

I must point out most emphatically that nothing less than a truly scientific approach, down to the very last detail of a carefully designed protocol is worthy of a national concern of this magnitude. Let's look at it more specifically. Perhaps definitive answers to the following key questions may serve to provide the initial clarification.

(1) Are physicians really more productive in a larger group setting than in smaller practice settings? If so, where does the scale show that economy begins and where does it diminish?

(2) Are physicians in the same sized group more productive in a prepaid setting?

(3) Do the "incentives" generally attributed to prepayment affect the quality of care?

(4) Is the lower use of hospital inpatient services, often associated with prepayment, consistent with quality care?

(5) Do prepaid groups really promote more efficient use of allied health personnel?

---

become only the director of a health care team. And we should be leading, not resisting, such change—NOW.

4. We need leaders who can see the big broad picture and act with the welfare of the public as their motivation, not for personal aggrandizement.

5. We need to stop talking to ourselves and once more become involved with the people. We will not lose respect, we shall only regain it.

The stakes are high, for if medicine does not lead effectively today—and so far it has not—the 1970's will see the public take over the management of the health care delivery system, and the entire fabric of this system will be weakened. That would be a loss for everyone.

These are the implications I see in this AMA series of meetings on long-range planning. What can you do about it?

Limited license: assuring good care while rehabilitating

By Don W. McLean, MD
Southfield

Doctor McLean

In the fall of 1964 the composition of the Board of Registration in Medicine was changed by the expiration of the terms of five experienced members and the appointment of five new members, experienced in the practice of medicine, but without previous experience in the regulation of medical practice. After electing our most experienced member to serve as president of the board our new members proceeded to learn something about the Medical Practice Act under which it had become our duty to assist in the regulation of the practice of medicine in Michigan.

As we attempted to cope with the complicated infractions of modern medical practice we found that we could grant a license to practice or we could take it away - no mechanism for regulation between these extremes has been provided in our medical practice act. By the spring of 1965 a subcommittee of three members was chosen to review our act and the recently enacted medical practice acts of other states and formulate recommendations for amendments to our act (P.A. 237.)

One of our most frequent and frustrating problems was our inability under the old act to find a way to preserve and utilize medical talent, while at the same time assuring complete safety and good medical care to the patient.

Consider the problem of a doctor who has given years of satisfactory service in his community and then for economic reasons has committed a felony (usually involving drugs or abortion). He has been found guilty in court and, after trial by the Board of Medicine, his license to practice has been revoked. He has served his sentence and is now back asking the Board to return his license.

In his interview with the Board it becomes evident that he has an inadequate knowledge of the modern practice of medicine. He has had little opportunity to progress and especially during the time his license was revoked he had been too embarrassed, frustrated and depressed to make any effort to increase his medical knowledge. His financial condition which was not good in the beginning of his trouble is now desperate. His wife has had to take a job and his son has had to interrupt his education.

Under our present act the board can return his license and hope that he will be ethical and successful in resuming his practice, or we can withhold his license on the grounds that he is unqualified and thereby complete the ruin of his career as a doctor.

Clearly both he and society deserve more from us than that.

DOCTOR SLAGLE/Continued

(6) Does the preventive concept traditionally associated with prepayment actually exist in practice?

(7) Will HMOs be a realistic answer to meet the health delivery needs in areas of low population density? Or in the inner city area?

(8) Will the HMO guarantee or even improve access to health care? Or will the HMO, being a source of care for a large number of persons, impede accessibility for the sick? What percentage of the physicians' services will be devoted to screening the "near sick" or the "worried well" or the hypochondriac with his imagined illnesses?

(9) How will the HMO guarantee the efficient use of services as it may be influenced by fluctuating formulae depending on the environmental variance in each location?

(10) How will the HMO implement educational programs regarding preventive health measures and how will they differ for each indigenous populace?

(11) To what extent will the HMO have general patient acceptance? Will they be regarded as impersonal, inconvenient and too much like public clinics?

Respect for the value of human life is firmly woven into the fabric of medicine and it is with this in mind that I stress the complexities facing us while examining any new programs in the delivery of health care.

Therefore, it is unthinkable that any political pie in the sky as it may apply to the delivery of health services will be viewed with enthusiastic acceptance before the cold, calculating logic of scientific and practical evaluation is applied and the programs proved workable.

We want to assure the availability, accessibility and acceptability of health care to all people regardless of circumstances or location, but we believe that the path for the future should be constructed upon the basic system's best features and the adoption of ONLY the tested and proven new approaches.

This type of problem presents itself in many different forms but the solution is essentially the same in all cases.

We must make it possible for him to earn a respectable living for himself and his family. At the same time we must place him in an environment where he will have adequate supervision and not only opportunity but encouragement to improve his knowledge and his work.

This will require a more sophisticated type of service from the board, it will require a larger and better trained staff and the acceptance of a greater responsibility for the rehabilitation of the medical man who has run afoul of the law.

In the proposed new act we have provided for this by the concept of a limited license. In Section 7C of the proposed act "the board may issue a limited license to practice medicine to a physician whose license has been suspended or revoked by the board. Practice under a limited license may be restricted to institutional, industrial, group practice, or practice under such conditions as may be set forth by the board. A limited license shall specify that the holder is licensed to practice medicine as prescribed by the board, but the certificate shall not differ in any other particular from a regular license. Holders of limited licenses shall remain under the scrutiny of the board and shall make such reports as are set forth under the Rules and Regulations of the board. Any violation of the conditions under which a limited, license is granted shall constitute cause for suspension or revocation of such license. At the discretion of the board, a limited license may be converted to a regular or unlimited license upon application of the licensee."

Note that under this wording the board is not obliged to issue a limited license in any case, also having issued such a license it is not obliged to change it.

Note also that limited licenses are available only to those who have had their licenses suspended or revoked by the Michigan board. It is not intended to solve problems for other states.

In the event that this concept is adopted and works well it could with minor modification be a good solution to the problem of the sick doctor whose ability to practice medicine is deteriorating through no fault of his own.

The fundamental concept of the new medical bill is to assure good medical care for the patient and suitable salvage and rehabilitation for the doctor.

(Editor's note: Doctor McLean is a former member of the Board of Registration in Medicine.)

Quiz

1. What's new in the field of industrial psychiatry?
2. What is the impact of the new Joint Commission Standards on physicians of a hospital staff?
3. What's the advice now to help recognize primary disease of the central nervous system as a cause of fainting? What's the best management of this problem?
4. What's the best practical management of renal vascular hypertension?
5. How can a family physician become more effective in family counseling?

For the answers to these questions and others, decide today to participate in the MSMS Annual Session at the Sheraton-Cadillac Hotel in Detroit, October 1-5. Mark the dates in your appointment book today.

Digest of Proceedings

1972 MSMS House of Delegates
Spring Meeting
March 19-20, Detroit

1972 House of Delegates Proceedings
Spring Meeting
Michigan State Medical Society

How to Use This Digest:

For your convenient use of the *Digest of Proceedings,* please note the following arrangement of contents:

Each report is followed immediately by the action of the reference committee on that report and then by the House action on the report of the reference committee. Resolutions are printed as they were finally approved or disapproved by the House.

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Michigan State Medical Society
1972 Spring Meeting
March 20-21, 1972

Call to Order and Special Reports

1. Call to Order

The Spring Meeting of the House of Delegates of the Michigan State Medical Society, held at the Detroit Hilton Hotel, Detroit, Michigan on March 20-21, 1972, convened at 9:00 a.m., Vernon V. Bass, MD, Speaker, and James D. Fryfogle, MD, Vice Speaker, presiding.

2. Invocation

The Speaker called upon A. Stewart Kerr, the Parliamentarian, to give the invocation.

3. Report of Committee on Credentials

Chairman Robert J. Toteff, MD, reported a quorum seated, the majority of whom were not from any one county.

4. Report of Committee on Rules and Order of Business

Chairman Henry A. Scovill, MD, reported that the Committee on Rules and Order of Business held its meeting December 15, 1971. Speaker Bass attended the meeting as a special guest, and the deliberations concerned the proposed order of business and other matters regarding implementation of the first spring meeting authorized by Resolution 3 of 1971.

Delegate Seating. The Committee recognized that newly elected delegates from most county societies are elected in December or January, but according to present MSMS bylaws cannot be seated until the next Annual Session which is in the fall. A telephone conference was held with Legal Counsel and the full Committee, which disclosed that a legally constituted House of Delegates at this first Spring Meeting must be composed of those delegates seated at the 1971 October meeting or their designated alternates Since actions taken by the House constituted in any other way could be vulnerable to legal attack, Speaker Bass ordered strict compliance with our present Bylaws. The Committee feels, however, that county society election processes should be recognized by the House, and we recommend that the Committee on Constitution and Bylaws clarify and prepare amendments to the MSMS Bylaws which conform to county society election procedures.

Introduction of Resolutions. The Committee feels that the efficiency of the House of Delegates could be increased greatly if it were required that resolutions be submitted to MSMS headquarters no later than 30 days prior to each meeting, both fall and spring, and that resolutions could not be introduced at any meeting except by the consent of two-thirds of the seated delegates. Such a rule would enable each delegation to study and analyze resolutions in advance and thereby improve the quality of deliberations at House meetings. We also suggest that resolutions requiring financing should be accompanied by careful cost estimates. The Committee has been informed that a resolution covering these items will be introduced at this meeting, and we urge that it be given favorable consideration.

Order of Business. The Committee approved the Order of Business as presented in the Delegates Handbook, and we recommend that the House vest in the Speaker the authority to recess its proceedings to a time certain at his discretion and without the necessity of a vote of this body. Such vesting of authority will constitute the only departure from Robert's Rules of Order, which we recommend otherwise govern the proceedings of this Spring meeting of the MSMS House of Delegates.

The report was adopted.

5. Speaker's Remarks - Vernon V. Bass, MD

The Speaker said the agenda calls for a few remarks by the Speaker, mostly a housekeeping report. The agenda is before you. This is a spring meeting. We decreed that it would be a regular session, that anything could be introduced. It is hoped that this will be a quick session, that you will be able to introduce resolutions at this morning's session, that perhaps the reference committees that have little business will get their work out of the way, and that Reference Committee "A", which has to do with Foundations, will meet most of the afternoon. It is hoped that all of the hearings will be over by such time that the reference committee chairmen will be able to start dictating at six o'clock so that their reports will be in your hands by eight o'clock tomorrow morning, allowing several hours for caucuses, and then the House again having its second meeting at ten o'clock to take up reference committee reports.

As has been explained, because this is a spring session and not an annual meeting, the delegates seated at the annual meeting hold over until the next annual meeting and the alternate delegates for the delegates can be seated.

6. President's Remarks - Sidney Adler, MD

This being our first spring session, which in part I recommended in my Inaugural Address, it can be a very historical session for the physicians of the State of Michigan if we act. If we react to these problems, then this could be a very historical session which would serve no useful purpose.

There are three important items before you at this session:

I. The foundation for peer review as a not-for-profit corporation separate from the Michigan State Medical Society. We now have peer review at our local levels. We have a research and Development Department for Socio-economics in our State Society, and we have a Judicial Commission, the court of last appeal.

The House of Delegates asked for the development of a Foundation as a mechanism for peer review. The Council and the Committee worked very hard and went through seven revisions. This will be presented at this session. I must say there is no clear-cut agreement in your Council or in the county component societies as to how this should or should not work. It is now in your hands. Many of you have asked me for my opinion in regard to foundations. I have carefully studied a great number. Those from California are various and sundry types of organizations that have arisen out of necessity in most cases. There is no foundation by the State Medical Association. So, I am confused in trying to report this to you, but being confused is not new to me.

I have the following questions to put before you in your deliberations:

1. Should peer review of a foundation type be on a county or regional basis for peer review, with a central collecting agency at a State level to furnish

data down to the county medical or regional societies?

2. Should we have one type of membership?
3. Should the membership be voluntary?
4. Should this foundation be limited to peer review? This has always caused a great number of questions; when we get together one's idea of peer review and another's; they are entirely different.
5. Should the board of directors of this foundation be elected by members who join the foundation?
6. Should the right of appeal in this foundation be separate from the Medical Society, or should the right of appeal be in the Judicial Council within the State Society?
7. MSMS and the Michigan Osteopathic Society could act as collecting bodies and disseminate knowledge. This would require a central area and the information to go down.
8. After your deliberations should this document be delayed until the fall session of the House of Delegates, if necessary, if there is no common ground or disagreement? I have found as I travel about that the basic knowledge as to how these things function that everyone has a different idea, and the ideas have not been crystallized.
9. The fear of HR 1, which is the Bennett amendment which everyone talks about and very few have analyzed, has a built-in PSRO mechanism. This PSRO is nothing more than a "Professional Service Review Organization". It is my personal opinion that, whether we like it or not, the federal legislation will have it; so we are pretty clear about that, for the simple reason that when the Federal Government pays out money it has a right to audit.
10. Do we really want to start another type of health care agency if we launch this Foundation?

So much for Foundations.

II. The next item which you will consider will be a revised Michigan Relative Value Scale. The Council accepted the new MRVS after much deliberation and many questions. The Council was not unanimous in its agreement on this, and they have stated that they have put this also in your hands. There are many, many questions in regard to this matter:

1. (and this is of recent vintage within the past two weeks) Should this be sent back to county medical societies for their review, deliberation and recommendation? At present we have not compared the new MRVS with the old one. We have not compared it with what this House agreed upon as usual, customary and reasonable.
2. What is the cost increase in total dollars between the old MRVS and usual, customary and reasonable? I say this because this economic impact in dollars - and I don't know whether it is up, down or in the middle - will be somewhat curtailed by the price freeze of 2.5 per cent imposed by the Federal Government; and any marked increase, however justified, must be tempered by what the Federal Government has done.
3. If this MRVS is to be used for Medicaid, how does it compare with the Medicaid fee schedule? Medicaid's fees cannot be greater than Medicare fees. I am now talking about Titles 18 and 19.
4. Can the physicians of Michigan operate with two separate fee schedule philosophies, namely, usual, customary and reasonable, and a fee schedule that you are now going to study?
5. Do we need a review of this new relative value by our capable Research and Development of Social Economic Committee so that they can tell us what the impact of this will be, what its distribution will be in regard to the various specialty societies, and in regard to family practice?
6. Do we want to arrange for fee schedules for the Federal Government? By that I mean, if you give them a fee schedule or a relative value by units it doesn't take them long to decide what the conversion number is, and then you are right in the box.
7. Are we a professional organization or are we going to be a trade union where all fees will be the same for all families? This is most important as far as I am concerned.

III. The Alexander Grant Study, Phase II of the Michigan State Medical Society, as authorized by this House of Delegates: I hope all of you have your copy of this. I have tried to analyze it. It is confusing. It will take a great deal of time to analyze. It should be discussed with knowledgeable people and surveys so that you know what they are talking about; I don't.

I would like to make a motion that a committee of this House, appointed by the Speaker of the House, study and report back at the next House of Delegates. I can see no useful purpose in us all arguing about something we haven't studied.

There are many, many problems unanswered in health care delivery and health care financing. I hope we do not react emotionally but act deliberately as physicians with reason and judgment on all these things. They should be based on facts as they relate to our patients and to consumers and us as physicians. No one has all the answers, not even the Federal Government, not even all the sociologists, because all one has to do is to review the literature. But there are separate parts of this that we of the medical profession can do. So, my advice as your President is to deliberate slowly, analyze carefully and, if need be, bring this back in the fall if we do not come to any common agreement now.

REFERENCE COMMITTEE "D", John H. McLaughlin, MD, Chairman, commended the President, Sidney Adler, MD, for his clear and concise remarks regarding the three major issues of the House of Delegates.

1. Foundation for Peer Review
2. Revised Michigan Relative Value Study
3. Alexander Grant Study

The Committee recommended that the Planning and Priorities Committee study Phase II of the Alexander Grant Study and report back at the next session of the House of Delegates.

THE HOUSE adopted the report of the Reference Committee and an additional recommendation that the AMA team be invited in to give advice and assistance to the Planning and Priorities Committee.

7. Remarks from the Chairman of the Michigan Delegation to the American Medical Association: Donald N. Sweeny, Jr., MD

It is my privilege to appear before you this morning as a spokesman for your busy Michigan Delegation to the American Medical Association. We, as a group, thank you for moving your meeting to the spring so that we may more properly represent you at your national society.

As we review the meeting of the AMA in November 1971, no single item drew more comment or continues to draw more comment from the assembled delegates, from the pharmaceutical throw-away magazines, and from everyone in general than the remarks made by the AMA President, Dr. Wesley Hall. Dr. Hall reiterated his request for a constitutional convention of the AMA at that time, and he encouraged "major repairs if the house of medicine is to continue to serve humanity with reward or financial gain, a subordinate consideration." His concern was for the following reasons which he cited:

1. Slipping membership
2. Financial difficulties
3. Emphasis on politics and legislative activities rather than scientific and medical education problems.
4. Divisiveness within the AMA and a struggle for power in the ranks "not only between elected officers and trustees but also between administration and staff".
5. Low morale among the AMA's 1,000 employees.

Two councils who studied the evidence filed reports urging that a constitutional convention not be held. Dr. Hall, nevertheless, made an emotional, repetitive, and at times factual appeal that such an overall study be carried out. His address, along with the aforementioned council reports, was the subject of a five-hour-long, packed, special reference committee hearing. Your Michigan Delegation urged that the outcome of any meeting result in unity of action.

It was disheartening to see trustee and officer alike accuse each other of malfeasance and outright misrepresentation of fact. It was a gloomy day, and the newspaper reports were kind to a remarkable degree.

The report of the reference committee stressed Dr. Hall's sincerity but saw little evidence that his critical remarks about employee discomfiture and membership divisiveness were factual.

The delegates saw fit to accept a Wisconsin motion that a special hearing be held at the next two conventions of the AMA, to obtain views from the membership on the past problems and the future course of the national society. These hearings will be held at the time of the conventions in San Francisco and Cincinnati in 1972 and prior to the New York convention in 1973. The Council on Long-Range Planning and Development is charged with the conduct of these open hearings.

I have the privilege of serving on this Council. We have met several times, most recently yesterday afternoon in Chicago, and have laid out the ground rules for these hearings. I feel that it is most important that all evidence be gathered not only about the problems but about the suggestions which you have for the improvement of the AMA. There is an opportunity for everyone to be heard.

We, as a group, are scheduled to sit down for two days within two weeks with Dr. Hall, to understand his concern. There is a resolution before you today which asks that the Speaker of the House of Delegates of the Michigan State Medical Society be empowered to convene open hearings about these subjects at the annual meeting of this House in October, 1972, so that a written summary of your feelings and those of your constituents can be made before The Council on Long-Range Planning and Development of the AMA.

Many changes in the structure of the AMA and subsequently in the structure of the constituent societies which make up this federation may be necessary before these can be finalized, but we must know your feelings. We must know what your problems are.

Ladies and gentlemen, this I think is a historic and significant action. Editorials in most of the throw-away journals would have you believe that there is a crying need for revision of the AMA's structure and policies. These same editorialists have already foreclosed on the hearings to be held in San Francisco and Cincinnati when they state, "These hearings will be packed with doctors-politicians, not the office-based, private practitioners who form the bulk of the AMA membership." The meetings at the State level, which we have proposed to you, will certainly avoid this danger.

I urge you to give great thought to these problems, and I urge your Reference Committee to report favorably on such a resolution. I urge that you urge your rank-and-file friends at home to write to your Michigan Delegation to the AMA so that they will be heard. If this open hearing is to be a whitewash, I assure you that each and every one of your delegates and alternate delegates from the Michigan State Medical Society to the AMA wants no part of it. If Wes Hall is right, we want to know about it.

To help The Council on Long-Range Planning and Development in its deliberations, you and your other AMA members will receive a membership opinion poll from the AMA within 30 days. This is the first in a series of polls planned to help guide and influence AMA policy and programs. Views on critical basic issues affecting the practice of medicine will be asked. The poll has been structured so that it can be answered objectively and rapidly by multiple-choice questions. Topics covered include national health insurance, professional liability, manpower and distribution, and AMA activities.

I urge that any gratuitous remarks concerning other matters, critical or complimentary, be added to the questionnaire. I assure you they will not be overlooked or ignored. If there is evidence of AMA organizational pathology, let's have it.

Mr. Speaker, on a more pleasant and happier note let me report to you that your delegation to the AMA is in a healthy state. We are functioning cooperatively and efficiently. We have had the privilege of new appointments to AMA committees and councils in the last six months so that more individuals than your Chairman will be spending weekends stacked up over Chicago's O'Hare Field every other weekend.

The following council commitments have been made: Otto Engelke, MD, Council on Environmental and Public Health; Robert Rice, MD, Council on Rural Health; Frank Walker, MD, Committee on Community Health; James Danforth, MD, Committee on Health Care Financing; George Slagle, MD, Council on Medical Services; Harold Falls, MD, Council on Health Manpower; Don Sweeny, MD, Council on Long-Range Planning and Development, Committee on Health Care Financing, Liaison Committee to the National Blue Shield, and the Committee on AMA Disability Insurance. John Moses, MD, who becomes a full delegate this year, although not yet appointed, has been assured a position on a subcommittee of the Council on Medical Education. We, as a delegation, are proud of the confidence of the AMA which has allowed each of us to serve our national organization and thereby serve Michigan better in these committee opportunities. It is no longer a one-man show.

As Chairman of the Michigan Delegation, Mr. Speaker, I wish to thank you and all the members of the House of Delegates for supplying me with such aggressive, knowledgeable and energetic fellow committeemen, We especially welcome our new members. We have a great deal of work for you also.

REFERENCE COMMITTEE "D", John H. McLaughlin, MD, Chairman, commended the Chairman of the Michigan Delegation to the AMA, Donald N. Sweeny, Jr., MD, for his excellent report on Dr. Wesley Hall's address of December 1971 to the AMA.

THE HOUSE adopted the report of the Reference Committee.

8. Remarks from the Chairman of The Council: Brooker L. Masters, MD

Your leadership has worked hard since the October meeting of the House of Delegates, and we have been facing some critical issues, of which you are aware from reading The Council minutes, Medigram, Michigan Medicine and personal correspondence. The tone of our new MSMS leadership is one that I think you recognize as being aggressive and, in my personal contacts throughout the state and from letters from many of you, I have been really pleased to learn of your positive reaction to this new stance of MSMS.

Under my leadership, this is going to continue with the full support of The Council. Because each of you receive the detailed minutes of The Council, once again the Chairman is not going to review these in his remarks before this House. I am going to relate to you, however, some of the important matters that need to come before you and introduce several officers to help me in this presentation. And then I want to conclude with some personal remarks.

First, I want to remind you that the Delegates have received copies of the remaining final two segments of the Michigan Relative Value Study. As in the past, The Council has deferred this to the House for action. This has been an arduous task for this committee and I commend them for their work on our behalf.

Related somewhat to this is my progress report to you with regard to our initial contact with the Department of Social Services relative to its takeover of the Title 19 Medicaid Program in Michigan. The Medical Advisory Committee to the Department of Social Services recently appointed a subcommittee to meet with the medical and osteopathic providers to begin discussions on developing a payment mechanism for Medicaid re-imbursement. Last Wednesday, I, along with other MD representatives and staff, and with our osteopathic counterparts, met with the Advisory Committee's subcommittee. We were not asked to quote "negotiate" unquote. We were merely attempting to identify the problems facing the MD and DO providers and the Department of Social Services. Both the osteopaths and the medical representatives said that it would be far better to have another meeting with the subcommittee following the House of Delegates meetings of each organization.

The key question that has to be decided is: How do we want to be paid for medical services to Medicaid patients? Do we want a Uniform Fee Schedule or do we want to be paid usual, customary, reasonable and prevailing as we currently know it? The House needs to answer this question. To help in this deliberation you will recall that I have transmitted to each of you background information regarding a Uniform Fee Schedule in connection with House of Delegates Resolutions 6 and 20.

And now, one of the most important things that has ever happened to the Michigan State Medical Society is the publication of the Alexander Grant study of physician attitudes in Michigan regarding their medical organizations and their needs and aspirations for them. The Speaker and I have transmitted this study to you for information because we realized that it was a complex document which would require study and it would not be possible to consider it at this meeting.

Doctor John Ylvisaker has reported to this House for the past three years on the idea of doing the study and the completion of the Phase I management study. Today I want to introduce him to you again to discuss the Phase II organizational study. Doctor Ylvisaker.

9. Treasurer's Remarks - John R. Ylvisaker, MD

In previous years, as Brooker has told you, I have spoken to you mainly about dollars, and in each one of my reports I have tried to relate those dollars to their productivity. When I attempted to relate those dollars to productivity I also tried to relate productivity to some of the problems that I was concerned about and that others have been concerned about, namely, those problems similar to what are being faced in the national society, that Dr. Hall has talked about.

I think we are a little bit ahead of the national society in this regard, that we have already addressed ourselves to this problem and we have committed dollars to look at ourselves to find out whether or not we really are accomplishing the purposes we have hoped we are accomplishing, and that we are properly representing people at the grass roots, because often as we look about us at ourselves, I think, we may well wonder whether we have become leadership by virtue of our own interest or by virtue of a lethargy, by virtue of a vacuum that exists in membership, or whether we truly represent the membership that pays the dues.

Because of some of these concerns, the House of Delegates last year voted this study. The out-of-pocket cost was $30,000. There are indirect costs that are considerably in excess of that, because our own executive staff put a great deal of time into this.

This final report of the Alexander Grant Company on the Phase II study has recently been delivered both to The Council and to the House of Delegates who originally provided authorization. This has been an intensive, professional study of the structure, activities, services, and modes of action of the Michigan State Medical Society in relationship to the effectiveness with which the Society accomplishes its goals and serves the needs and desires of its members.

The basic data and the resultant observations and conclusions have been thoroughly reviewed and have been determined to be statistically valid. This determination has been made both within the Alexander Grant organization and from our own people. These recommendations require examination and implementation.

I would like to emphasize one thing: This study is not merely an opinion survey. Because of the statistical validity of the data and the conclusions, it is really a directive by the membership at large to the leadership, first, to analyze these observations and conclusions; second, to examine the recommendations; third, to accept, modify or reject the recommendations or to devise alternatives; lastly, to institute appropriate action for support, innovation, or change, as may be appropriate, to comply with the mandates which are inherent in the study.

It is essential that The Council and the House of Delegates receive this document and to act upon it as such a mandate from the membership.

Much of the substance of the report referable to services and existing activities we are already structured to implement directly. Indeed, the groundwork for implementation is already being laid. Those observations and recommendations regarding more complex services, however, and most important regarding the restructuring and the reorganization of the State Society necessary to accommodate both existing and future patterns of practice and membership, must be studied intensively by The Council of the Michigan State Medical Society. This will require selective assignments of appropriate responsibilities to committees of The Council and the House of Delegates as well as to our executive staff.

Ladies and gentlemen, I think we have at hand probably the most significant and momentous opportunity of our professional generation. The tools for our task have been provided. The performance of this task will challenge our insight, our vision, our political skill, our courage and our daring. The product we achieve will be a measure of our statesmanship. The success or failure of our efforts will be the heritage of our successors for decades to come.

REFERENCE COMMITTEE "B", D. Bonta Hiscoe, MD, Chairman, recommended that the Alexander Grant Study, Phase II, be evaluated by the Committee on Planning and Priorities and that this study should involve the full spectrum of this medical society, including officers and members of local societies, hospital staffs, and others that would be appropriately included.

THE HOUSE adopted the report of the Reference Committee.

Dr. Masters continued -

Peer review has been a prominent word in our medical organizational language for the last year or so, and in October the House of Delegates asked that some further work be done on a set of Bylaws that might create a separate corporation for peer review in Michigan. Doctor Robert Prophater and his Utilization Review Committee have labored hard over several successive drafts of these Bylaws, the seventh revision of which has been sent to you for study. Doctor Prophater has some remarks he would like to share with you about a Foundation for Michigan.

10. Remarks from the Chairman of the MSMS Committee on Utilization Review and Health Insurance Problems: Robert C. Prophater, MD

Thank you, Dr. Masters and Speaker of the House. It is my duty to present to you a few remarks in relation to foundations. First of all I would like to give you the background and history as to how this came about.

In September, 1970, Doctor Ralph Cooper of Wayne County introduced Resolution 100 to the House of Delegates, which resolved: "That the MSMS Council investigate the desirability of forming a Medical Foundation in Michigan and, if found desirable, take the necessary steps for forming such a Foundation." The resolution was adopted.

Doctor Ross Taylor, Chairman of The Council, then gave the resolution to the Committee on Utilization Review and Health Insurance Problems, whose members are: Robert C. Prophater, MD, Chairman; Paul J. Connolly, MD, Worth W. Henderson, MD; Robert M. Leitch, MD; Edwin S. Woodworth, MD; John B. Bryan, MD; and Sydney Scher, MD.

Since that time members of the staff and Robert A. Songe, MD, Charles S. Stevenson, MD, and myself have visited the Denver Foundation and attended AMA Peer Review in Chicago and Columbus. We have reviewed many Articles of Incorporation and Bylaws of other states, which were given to The Council on January 24, and they, in turn, moved to present them to this House of Delegates.

What is peer review? The most frequent question asked is "What is peer review?" The AMA House of Delegates gives the following definition of peer review:

> "Evaluation by prescribing physicians of the quality and efficiency of services ordered or performed by the practicing physicians. Peer review is the all inclusive term for medical review effects. Medical practice analysis; in patient, hospital and extended care facility utilization review, medical audit, ambulatory care review, and claims review are all aspects of peer review."

What is a Foundation?

> "A Foundation for medical care is an organization of physicians sponsored by a medical society or association. It is a separate and autonomous non-profit tax exempt organization with its own Board of Trustees."

A Foundation for medical care is conceived with the development and delivery of medical services and the reasonable cost of health care, whether publicly or privately formed. It espouses the concept of free choice of physician and hospital by the patient and the fee-for-service principle.

A Foundation establishes standards for health care based on patterns or norms, in the area. Through peer review, it preserves and enhances the quality of medical care, guards against both over-utilization and under-utilization of medical services in and/or out of the hospital.

The Foundation for Medical Care provides a mechanism through which physicians may adequately deal with public or private organizations that provide financing for health care services.

Why do we need a Foundation? Some advocates say that we can operate within the Medical Society and through peer review mechanism we now have, but this system has only scratched the surface.

First, regional or district peer review committees must be established across the state and their members trained in the methods of operation, norms, or standards of medical care in Michigan must be established in order that the various committees may be consistent in the review of cases brought to their attention. Hospital Utilization Review must be encouraged and stimulated to reach its peak of effectiveness. It must be convincingly demonstrated to the physicians of Michigan that peer review is not a punitive mechanism but rather an educational program, which will pinpoint the physician who has not kept up, who is not practicing good quality medicine, pointing out to him his failings and encouraging him to take the necessary remedial steps.

Secondly, to establish and conduct a program such as this requires funds - money that is not available in MSMS budget. Based on the experience of states which have already established Foundations, money which is not available to a medical society is accessible to a foundation - from business, industry, other foundations and HEW.

Thirdly, there are strong indications that medical societies themselves would not be authorized to perform this review function. But that a separate organization sponsored by a state society could be given this responsibility. The Bennett Amendment to HR 1 - PSRO has been introduced and states membership of the qualifying organization must be voluntary and open to all doctors of medicine and osteopathy licensed to engage in the practice of medicine or surgery in the area without requirement of membership in or payment of dues to any organized medical society. Recent changes in Washington indicate that all reference to Peer Review will be taken from the HR 1 and any reference to Peer Review will be in the Bennett Amendment only.

Lastly, there are at least 12 proposals before Congress at the present time which deal with the provision and financing of health care. It is inevitable that Congress will sooner or later vote on a measure for national health insurance. Probably one that includes specific features of several different bills already introduced. The one thing that most of these bills have in common is the demand for cost and quality control of health care services through peer review.

True peer review requires that the work of physicians be reviewed by other physicians not by bureaucratically appointed representatives of labor, business, government or the public who have no qualifications for this task.

The medical scene is changing - no longer can a medical practitioner set in his castle and have an uncomplicated physician-patient relationship. There is third party involvement and increasingly more so and we must be ready to meet the challenges as an organization working together for the preservation of the private practice of medicine.

A Foundation is an answer but do not be disillusioned this will be the panacea for solving all health care problems of the day. Many other states have formed foundations under duress - Let us form a Foundation for Michigan medicine where we can anticipate and be ready for problems that medicine will be facing in the very near future.

There are 31 pages in the revised seventh draft and I will not read them as you will have an opportunity in the Committee hearings to discuss them, but allow me to leave you with this thought. A great deal of time and effort has been expended in the development of the Bylaws and Articles of Incorporation, but to date - with several opportunities neither The Council nor this House of Delegates have approved the concept of a Foundation for Michigan.

Many more hours and days could be spent going over the Bylaws and Articles of Incorporation line by line. But, gentlemen, I encourage you to decide - do we or do we not want a Foundation in the State of Michigan?

REFERENCE COMMITTEE "A", Richard McMurray, MD, Chairman, recommended approval of Draft No. 8 of the Articles of Incorporation and Bylaws for a foundation, (Michigan Medical Programs, Inc.) to be established at the state level for peer review, to be implemented at the discretion of The Council, as follows:

* * * *

ARTICLES OF INCORPORATION MICHIGAN MEDICAL PROGRAMS, INC.

(Non-Profit)

These Articles of Incorporation are signed and acknowledged by the incorporators for the purpose of forming a non-profit corporation under the provisions of Act. No. 327 of the Public Acts of 1931, as amended, as follows:

ARTICLE I.

The purpose or purposes for which the corporation is formed are as follows:

To promote, develop and encourage the distribution of high quality medical services to the people of the State of Michigan; to preserve for the health care professions and public freedom of choice of both physician and patient; to preserve the physician-patient relationship; to protect the public health; to establish a peer review mechanism for health care to assure the Michigan public of optimum use of its health care expenditures; to work in cooperation with those prepaid medical care plans which provide for periodic and realistic budgeting for medical care and which subscribe to and provide for the freedom of selection and the guarantee of the physician-patient relationship in order to promote the purposes of this foundation; to provide an organization through which the Michigan State Medical Society and the Michigan Association of Osteopathic Physicians and Surgeons, Inc., and their component county associations, may, without loss of identity or autonomy, promote their purposes and the purposes of this organization; and, in general, to carry on any activity in connection therewith and incident thereto not forbidden by the laws of the State of Michigan and with all the powers conferred upon non-profit corporations by the laws of the State of Michigan.

The functions of this corporation shall be:

I. To promote, facilitate and improve peer review:

- (a) By compiling and distributing necessary data to local medical foundations in the State of Michigan.
- (b) By serving in an advisory capacity to any regional foundation desirous of assistance.
- (c) By working with any local group on an interim basis until such a group has set up its own foundation and it is functioning adequately.
- (d) By carrying on pertinent foundation functions in areas where none is in operation and when requested by the local medical society.
- (e) By acting as an appellate and/or judicial group.

BYLAWS OF MICHIGAN MEDICAL PROGRAMS, INC.

ARTICLE I

Name

This corporation shall be known as Michigan Medical Programs, Inc. It shall be incorporated under that name as a non-profit, non-stock corporation in accordance with the laws of the State of Michigan.

ARTICLE II

Purposes

SEC. 1 This corporation shall be conducted not for profit. All of the income, revenue and earnings of this organization shall be held, managed, used and expended to carry out the objects of the organization and without profit to any member. No member, trustee or officer of the corporation or other private individual shall be entitled to share in the distribution of any of its assets upon liquidation or dissolution. However, nothing herein contained shall be contrued to prevent a distribution of the properties of the corporation to another distributee, otherwise properly made in accordance with the provisions of these Bylaws and the purposes herein stated, solely by reason of the fact that one or more of the members, trustees or officers of this corporation may be connected with or associated with the distributee as a shareholder, member, trustee, director, officer, or in any other capacity.

SEC. 2 The functions of this corporation shall be:

I. To promote, facilitate and improve peer review:

- (a) By compiling and distributing necessary data to local medical foundations in the State of Michigan.
- (b) By serving in an advisory capacity to any regional foundation desirous of assistance.
- (c) By working with any local group on an interim basis until such a group has set up its own foundation and it is functioning adequately.
- (d) By carrying on pertinent foundation functions in areas where none is in operation and when requested by the local medical society.
- (e) By acting as an appellate and/or judicial group.

The objects for which this corporation is founded are: To promote, develop and encourage the distribution of high quality medical services to the people of the State of Michigan; to preserve for the health care professions, and the public, freedom of choice of both physician and patient; to preserve the physician-patient relationship; to protect the public health; to establish a peer review mechanism for health care to assure the Michigan public of optimum use of its health care expenditures; to work in cooperation with those prepaid medical care plans which provide for periodic and realistic budgeting for medical care and which subscribe to and provide for the freedom of selection and the guarantee of the physician-patient relationship in order to promote the purposes of this corporation; to provide an organization through which the Michigan State Medical Society and the Michigan Association of Osteopathic Physicians and Surgeons, Inc., and their component county associations, may, without loss of identity or autonomy, promote their purposes and the purposes of this organization; and, in general, to carry on any activity in connection therewith and incident thereto not forbidden by the laws of the State of Michigan and with all the powers conferred upon non-profit corporations and the laws of the State of Michigan, upon ratification of the membership.

SEC. 3 The work of the corporation shall be carried on and all funds of the organization shall be used and applied exclusively for charitable, scientific, literary or educational purposes, and in such manner that no part of such funds will inure to the benefit of any member, officer or trustee of this corporation or any other corporation, organization, foundation, fund or institution or any other individual; except that reasonable compensation may be paid for services rendered to or for this corporation in furtherance of one or more of its purposes and except that individuals may benefit from grants, scholarships, fellowships and similar payments or contributions made for charitable, scientific, literary or educational purposes in futherance of the purposes of this corporation. The corporation shall not engage, other than as an insubstantial part of its total activities, in activities that in themselves are not in futherance of one or more of the exempt purposes as specified in Section 501 (c) of the Internal Revenue Code of 1954, as amended. No part of the assets or income of the corporation shall be paid or contributed to any other corporation, organization, foundation, fund, institution or governmental body, any substantial part of the activities of which consist of carrying on propaganda or otherwise attempting to influence legislation or which participate or intervene in any political campaign.

SEC. 4 a. Peer Review Activities. Peer Review shall mean the evaluation by practicing physicians of the quality and efficiency of services ordered or performed by other practicing physicians. Peer Review is an all inclusive term for medical review efforts. Medical practice analysis, inpatient hospital and extended care facility utilization review; medical audit, ambulatory care review and claims review are all aspects of Peer Review.

SEC. 4 b. Peer Review assignments and contracts obtained by the corporation will be whenever possible, delegated to and carried out at the appropriate county or regional or local levels by review panels of doctors locally so designated with such concerned specialist support as the review may require. An appeal procedure will be established for the appeal, throughout all levels, of the decisions, determinations or rulings to the Peer Review Committee of the Board of Trustees. The corporation will retain administrative and fiscal responsibility therefor and it will foster all peer review work within the ethical concepts of the American Medical Association and of the American Osteopathic Association, and within the Guidelines of the Michigan State Medical Society and the Michigan Association of Osteopathic Physicians and Surgeons. Consistent with that latter purpose, the corporation will endeavor to promote uniformity of procedures and guidelines for peer review procedures within the State.

ARTICLE III

Membership

SEC. 1 The members of this corporation shall be the participating physicians. All doctors who participate with the corporation shall be eligible for membership.

SEC. 2 The privilege of voting shall vest in and be held and enjoyed by members only. Voting may be by proxy including deliberative sessions.

SEC. 3 Any licensed physician who is a member in good standing in the Michigan State Medical Society or the Michigan Association of Osteopathic Physicians and Surgeons, Inc. is automatically a member of this corporation. Any other physician licensed to practice in Michigan may become a member upon written application. Any member may resign by 15 days written notice to the corporation.

SEC. 4 Members shall have the privilege of voting, of holding any office and the privilege of membership on any committee. The members may, at any meeting duly called and convened for the purpose, rescind and prior policy decision of the corporation, its officers or Trustees, recall any officers or Trustees or amend these Bylaws; except that they may not repudiate a valid contractual obligation of the corporation. Any contract binding on the members for their service shall be submitted for approval prior to its acceptance. The Chairman (or if he shall fail or refuse to act within thirty (30) days from receipt of any petition, any other officers or trustee) shall give notice and arrange to hold a meeting of the members for such purpose within the State of Michigan upon the written petition of not less than two (2%) percent of the members. Such meeting shall be noticed for a date not more than ninety (90) days from receipt by the corporation of such petition. Any such petition shall set forth in detail the demands of the petitioners. The day, hour and place of such meeting shall be set by the person or persons giving notice of such meeting. Notice of such meeting shall be given to each member not less than thirty (30) nor more than seventy-five (75) days before the date on which the meeting is to be held by delivering a written notice thereof to each such member personally or by posting such notice in an envelope addressed at the post office address of each such member of record with the corporation with sufficient postage attached thereto. No notice of any adjournment thereof shall be required to be given. At any such meeting and at any and all adjournments thereof, only such business as is slated in the call and notice of such meeting may be transacted. At such a meeting and at any and all adjournments thereof, a quorum must be present to transact any business. A quorum shall be established if ten (10%) percent of the members are present in person or by proxy; provided, however, such a quorum shall be so established if, and only if, three (3) percent or more of the members of the corporation are present in person at such a meeting or any adjournment thereof. Except as otherwise provided in these bylaws, at any meeting and at any and all adjournments thereof, ten (10) percent or more of the votes of the total membership shall be required to take any action. At any such meeting every member on the date the petition for such meeting is received by the corporation shall be entitled to one (1) vote upon all matters; cumulative voting is expressly prohibited. In the absence of a quorum, a majority of those present may adjourn the meeting from time to time and at any such adjourned meeting at which a quorum may be present any business may be transacted which might have been transacted at the meeting as originally called. At any such meeting the person calling the meeting, or in his absence the Chairman, or in the absence of each of them the Vice Chairman of the corporation shall act as Chairman, and the Chairman of the meeting may appoint any person as secretary of the meeting and may appoint any person as the Inspector of the Election. The Inspector or Inspectors of the Election shall determine the validity of any proxy and the right to vote of any person whose right is challenged, and shall receive and count the votes and determine the result of any question or motion voted upon and his or their certification of vote shall be prima facie evidence thereof.

SEC. 5 The corporation's operations shall be funded by such grants, study funds and contractual revenue from peer review projects and related studies as it shall from time-to-time receive from outside sources.

ARTICLE IV

Meeting of members

SEC. 1 The annual meeting of members of the corporation for the election of the Board of Trustees and for transacting such other business as may properly come before the meeting shall be held each year during the month of June. The day, hour and place of the annual meeting shall be set by the Chairman of the corporation. If the Chairman fails to act, the meeting shall be set by the Board of Trustees.

Members shall be entitled to receive notice of such meeting and may attend the annual meeting with voice and with the right to vote.

SEC. 2 Special meetings of the members for any purpose may be called at any time by the Chairman or by a majority of the Board of Trustees. They may be held at the same time and place as the meetings of The Council of the Michigan State Medical Society or the Board of Trustees of the Michigan Association of Osteopathic Physicians and Surgeons, Inc., at the option of the Chairman.

ARTICLE V

Board of Trustees

SEC. 1 The property, affairs and business of the corporation shall be managed by the Board of Trustees.

SEC. 2 The Board of Trustees shall be composed of 32 members. The Michigan State Medical Society and the Michigan Association of Osteopathic Physicians and Surgeons, Inc., each shall appoint annually one Trustee the thirty (30) additional members, pro rated among the licensed Doctors of Medicine and Doctors of Osteopathy shall be elected by the membership on a regional basis, apportioned according to the population of the State of Michigan.

SEC. 3 The first Trustees designated as such in the Articles of Incorporation of this corporation shall hold office and exercise all powers granted to the Board of Trustees until the first annual meeting. Thereafter, a new Board of Trustees shall be elected by the membership in accordance with these Bylaws; the new Board of Trustees so elected may be composed of all, some or none of the first Trustees. At the first election ten members of the Board of Trustees shall be elected for a period of three (3) years, ten (10) for a period of two (2) years and ten (10) for a period of one (1) year; thereafter, ten (10) new members shall annually be elected to the Board of Trustees for a period of three (3) years. Membership is a qualification for the office of Trustee. No trustee may serve more than two successive terms.

SEC. 4 At the second annual election of Trustees, and at each annual election thereafter, the ten (10) persons receiving the greatest number of votes shall be elected Trustees for a period of three (3) years. All elections of Trustees shall be by mail ballot.

SEC. 5 There shall be not less than six (6) members of the Michigan State Medical Society nor less than three (3) members of the Michigan Association of Osteopathic Physicians and Surgeons on the Board of Trustees.

SEC. 6 Any Trustee may resign at any time by giving written notice thereof to the Chairman. Such resignation shall take effect at the time specified therein or, if the time be not specified, upon receipt thereof. Unless otherwise specified therein, the acceptance of such resignation shall not be necessary to make it effective.

SEC. 7 Any Trustee may be removed from office by an affirmative vote of the majority of the membership or by two-thirds (2/3rds) vote of all the Trustees then so serving, at any special meeting of the members or the Board of Trustees called for such purpose.

SEC. 8 Any vacancy on the Board of Trustees because of death, resignation or removal may be filled by the remaining Trustees at any meeting of the Board of Trustees until the next annual meeting of members.

SEC. 9 Meetings of the Board of Trustees shall be held at the principal office of the corporation, or at such other place or places within or without the State of Michigan as may from time to time be determined by a majority of the Board of Trustees. An annual meeting of the Board of Trustees shall be held, upon notice, not less than twenty (20) days following the annual meeting of the members for the purpose of electing and appointing officers for the ensuing year as well as transacting such other business as may come before the meeting.

SEC. 10 Written notice of the time and place and principal purposes of every meeting of the Board of Trustees shall be duly served on or sent, mailed or telegraphed to each Trustee not less than ten (10) days before the meeting, except that the annual meeting of the Board of Trustees may be held without notice immediately after the annual meeting of the members of the corporation at the same place as such meeting was held. No notice of an adjourned meeting need be given. Meetings may be held at any time without notice if all of the Trustees are present or if those not present waive notice of such meeting in writing, either before or after the holding thereof.

SEC. 11 A majority of the Trustees in office at the time of any meeting of the Board of Trustees shall be present in person at such meeting to constitute a quorum for transacting business. The act of a majority of the Trustees present at such a meeting, at which a quorum is present, shall be the act of the Board of Trustees, except as set forth in Section 7 of this Article V. In absence of a quorum, a majority of those present may adjourn the meeting from time to time until a quorum be had. The Trustees shall act only as a Board and the individual Trustees shall have no powers as such. If the Trustees shall severally or collectively consent in writing to any action to be taken, such action shall be a valid corporate action as though it had been authorized at a meeting of the Board of Trustees.

SEC. 12 The members of the Board of Trustees may be paid such fees and compensation for their services and may be reimbursed such expenses as the Board of Trustees may from time to time determine.

ARTICLE VI

Officers

SEC. 1 The officers of the corporation shall be a Chairman, a Vice Chairman, a Treasurer, a Secretary and such other officers as the Board of Trustees may designate. No two offices may be held by one person. Officers must be members of the corporation. An officer may be elected to succeed himself.

SEC. 2 The officers of the corporation shall be elected annually by and from the Board of Trustees. Each officer shall hold office until his successor shall have been duly elected, or until his death, resignation or removal.

SEC. 3 The Chairman of the corporation shall be a Trustee and shall be the chief executive officer of the corporation. Subject to control of the Board of Trustees, he shall have general and active management, direction and supervision over the business of the corporation and over its several subordinate officers. He shall preside at all meetings of members and meetings of the Board of Trustees. He shall be an exofficio member of all standing committees, if any, and shall have the general powers and duties of management usually vested in the office of the president of a corporation. The Chairman shall have such other powers and duties as may be assigned to him by the Board of Trustees. The Chairman is authorized to sign all contracts, orders, mortgages, pledges, deeds, licenses, and other instruments of a special nature. He shall fix the salary of all employees other than officers and shall perform all other duties pertaining to his office, without special authorization of the Board of Trustees, provided that such actions are not contrary to the express instructions of the Board of Trustees.

SEC. 4 At the request of or in the absence or disability of the Chairman, the Vice Chairman shall perform all duties of the Chairman and when so acting shall have all the powers of and be subject to all the restrictions upon the Chairman. The Vice Chairman shall have such other powers and shall perform such other duties as from time to time may be prescribed by the Chairman or the Board of Trustees.

SEC. 5 The Treasurer shall have custody of all funds of the corporation and shall keep in books belonging to the corporation, full and accurate accounts of all receipts and disbursements; he shall deposit all moneys, securities and other valuable effects in the name of the corporation in such depositories as may be designated for that purpose by the Board of Trustees. He shall disburse the funds as may be ordered by the Board, taking proper vouchers for such disbursements and shall render to the Chairman and the Board of Trustees at the regular meetings of the Board, and whenever required by them, an account of all of his transactions as Treasurer, and of the financial condition of the organization. The payment of any and all taxes shall be the sole responsibility of the Treasurer. If required by the Board of Trustees, he shall deliver to the Chairman, and shall keep in force, a bond in the form, amount and with the surety or sureties satisfactory to the Board, conditioned for the faithful performance of the duties of his office and for restoration to the corporation in case of his death, resignation, or retirement or removal from office, of all books, papers, vouchers, money and property of whatever kind in his possession or under his control belonging to the corporation. The Treasurer may delegate any of his functions to an Assistant Treasurer and may delegate any of his administrative duties to the Executive Secretary.

SEC. 6 The Secretary shall be the recording officer of the corporation. He shall be responsible for the minutes of the meetings of the membership and of the Board of Trustees. He shall handle all official correspondence.

SEC. 7 The Executive Secretary shall be the chief administrative officer of the corporation. He shall be elected or appointed by the Board of Trustees. He shall manage its affairs and activities, under the supervision of the Board of Trustees and the Chairman. The duties of the Executive Secretary shall consist of the following:

1. He shall cooperate with and keep the minutes of all committees;

2. He shall cause to be published and delivered to the members, reports of the business and activities of the corporation;

3. He shall handle all correcpondence not otherwise specifically handled by the officers;

4. He shall prepare and tender the required written notices of all meetings;

5. He shall have custody of the books of the corporation subject to the Treasurer's need therefor, and shall maintain a roster of the members;

6. He shall be responsible for the collection of all assessments;

7. He shall keep a correct account of all moneys coming into his possession and handle the same as instructed by the Treasurer and the Board of Trustees.

8. He shall be responsible for the routine of his office and the employment of such assistants as may be authorized;

9. He shall encourage members and the public to utilize the various aids and services provided by the corporation; and

10. In general, he shall promote and make effective the objects for which this organization was formed. In addition to those duties enumerated herein, the Executive Secretary shall perform such other duties as the Chairman and the Board of Trustees may require of him.

SEC. 8 The Board of Trustees may appoint such other officers, committees or agents as the business of the corporation may require. It shall continuously retain experienced insurance counsel and legal counsel experienced in medical counseling.

SEC. 9 Any officer may be removed for cause in accordance with due process by vote of the majority of all the Trustees then so serving, at any meeting of the Board called for such purpose.

SEC. 10 Any officer may resign at any time by giving written notice thereof to the Board of Trustees or to the Chairman. Any such resignation shall take effect at the time specified therein; and unless otherwise specified therein, the acceptance of such resignation shall not be necessary to make it effective.

SEC. 11 Any vacancy in any office because of death, resignation, removal, disqualification or other cause shall be filled for the unexpired portion of the term by the Board of Trustees.

SEC. 12 Salaries of officers shall be fixed from time to time by the Board of Trustees. No officer shall be prevented from receiving such salary by reason of the fact that he is also a Trustee.

ARTICLE VII

Executive Committee and Other Committees

SEC. 1 There shall be an Executive Committee composed of the Chairman, Vice Chairman, Treasurer, the Secretary, and three trustees elected by the Board of Trustees.

SEC. 2 It shall be the duty of the Chairman at the first meeting in each year of the newly constituted Board of Trustees to select from the total membership of the corporation, individuals to serve on standing committees:

a. Membership Committee
b. Peer Review Committee(s)
c. Utilization Committee(s)
d. Contracts Committee(s)
e. Other Standing Committees
f. Nominating Committee

The members of these committees shall be appointed by the Chairman, subject to the approval of the Board of Trustees, and shall hold office for a period of one year. Each standing committee shall have as many members thereon as the Board of Trustees may from time to time determine and shall have such duties and shall perform such functions as may be required of them by the Board of Trustees. Insofar as is practicable, the ratio of members as between the Michigan State Medical Society and the Michigan Association of Osteopathic Physicians and Surgeons, Inc., on the Board of Trustees shall be maintained as the ratio of members on each such committee.

SEC. 3 The standing committees shall be the principal mechanisms for effectuation of the corporation's purposes as set forth in Article II hereof. Such committees may be subdivided functionally and geographically into sub-committees. Standing committees are empowered to delegate functions, with the coordination and assistance of the Executive Secretary, to appropriate county and local agencies and organizations; provided however, that no committee may enter into contracts binding the corporation, such contractual rights being expressly reserved in these Bylaws to the Board of Trustees, and the Chairman. Within the judgment of the Board of Trustees, such committeemen can be paid appropriate fees for their services and reimbursement for their expenses. The Trustees shall provide the committees with such clerical and staff assistance as may be needed.

SEC. 4 The Board of Trustees may from time to time create such other standing and special committees, the members of which shall be selected and appointed as in the foregoing section. The Board shall invest said committees with such powers and duties as it deems desirable.

ARTICLE VIII

Election

SEC. 1 The Nominating Committee shall prepare a list of candidates for the office of Trustee and present it to the Board of Trustees on or before the first Monday in April each year. The Committee shall nominate at least two candidates for each office. The candidates shall be selected on a regional basis apportioned according to the population of the State of Michigan and pro rated among Doctors of Medicine and Doctors of Osteopathy. Additional nominations may be made by written petition, signed by at least 25 members and received by the corporation not later than 20 days prior to the annual election.

SEC. 2 The official ballot shall carry the names of the candidates for the office of Trustees of the corporation and shall be divided into regions proportionated according to the population in the State of Michigan. It shall be the responsibility of the Secretary to mail the appropriate ballot to each member. It shall be mailed to each member at least thirty days prior to the date of the annual meeting. All ballots must be returned on or before the annual meeting.

ARTICLE IX

Miscellaneous

SEC. 1 All checks, drafts and orders for payment of money shall be signed in the name of the corporation by such officers or agents as the Board of Trustees shall from time to time designate for that purpose.

SEC. 2 When the execution of any contract, covenant or other instrument has been authorized without specification of the executing officers, the Chairman or Vice Chairman and the Treasurer may execute the same in the name and on behalf of the corporation. The Board of Trustees shall have the power to designate the officers and agents who shall have the authority to execute any instrument.

SEC. 3 The membership roll, the books of accounts, the minutes of proceedings of meetings of members and Board of Trustees shall be open to inspection upon the written demand of any member at any reasonable time if for a purpose reasonably related to his interest as such member, and shall be exhibited at any time when required by written request of ten (10) percent of the members. Demand of inspection other than that at a members meeting shall be made in writing upon the Chairman.

SEC. 4 The Board of Trustees shall cause to be sent to the members not later than one hundred-twenty (120) days after the close of the fiscal year, an annual report of the financial affairs of the corporation. This requirement may be satisfied by publication in the official journals of the Michigan State Medical Society and the Michigan Association of Osteopathic Physicians and Surgeons, Inc.

SEC. 5 The corporation shall keep in its principal office a true copy of the Bylaws, as amended, which shall be open to inspection by members at reasonable times during office hours.

SEC. 6 Robert's Rules of Order shall be the parliamentary guide for all meetings when not in conflict with these Bylaws.

SEC. 7 The Principles of Medical Ethics of the American Medical Association, as to those members who are medical doctors, the Code of Ethics of the American Osteopathic Association, as to those members who are osteopathic physicians, and such principles of professional conduct as this corporation may adopt by a majority vote of its members shall govern the organization and all members thereof.

SEC. 8 A member who is guilty of a felony, gross misconduct, either as a physician or citizen, or who violates any of the provisions of these Bylaws, or any provisions of the Principles of Medical Ethics of the American Medical Association, as to those members who are medical doctors, the Code of Ethics of the American Osteopathic Association, as to those members who are osteopathic physicians, or any principles of professional conduct adopted by this corporation, or who acts contrary to or in violation of any contracts, agreements, statements of principle of this organization shall be liable to censure, suspension or expulsion. The procedure to be followed with respect to censure, suspension or expulsion of a member shall be the procedure now or hereafter contained or provided in the Bylaws of the Michigan State Medical Society or the Michigan Association of Osteopathic Physicians and Surgeons, Inc., whichever shall apply, as they now exist or as they may be hereafter amended; said procedures are hereby incorporated into these Bylaws by this reference and their decision shall be binding on this corporation; provided, however, if this corporation does not have a committee to hear disciplinary matters, the hearing body shall be the Board of Trustees.

ARTICLE X

Indemnification

Each person who is a Trustee or officer of this corporation shall be indemnified by it from and against costs and expenses sustained or incurred by him in connection with any action, suit or proceeding in which he may be a party by reason of his being or having been a trustee or officer of this corporation, except in relation to matters as to which he shall be adjudged in such action, suit or proceeding to be liable for negligence or misconduct in the performance of his duty as such trustee or officer. The foregoing right of indemnification shall not be exclusive of other rights which a trustee or officer may be entitled to as a matter of law.

ARTICLE XI

Amendment of the Bylaws

SEC. 1 These Bylaws may be amended, altered, changed, added to or repealed by the affirmative vote of a majority of the members present and entitled to vote at any meeting of the members if notice of the proposed amendment, alteration, change, addition or repeal be contained in the notice of the meeting, or by the affirmative vote of a majority of the Board of Trustees if the amendment, alteration, change, addition or repeal be voted at a meeting of the Board and adopted at a subsequent meeting of the members.

SEC. 2 In the event twenty (20) or more members petition, by a written petition served upon the Secretary or the Chairman at least thirty (30) days prior to a meeting of the members, the petition shall be presented for consideration by the members at its next regularly noticed meeting. Any such petition shall set forth in principle the Bylaws changes sought by the petitioners.

ARTICLE XII

Dissolution

In addition to such methods of dissolution as provided by law, this corporation may be dissolved at any time by the majority vote of the Board of Trustees at a special meeting called for that purpose and a two-thirds (2/3rds) vote of the members, present or by proxy, at a special meeting called for that purpose. Such membership meetings shall be called and conducted in the manner provided for in, respectively, Article III, Sec. 4 and Article IV, Sec. 2 hereof.

THE HOUSE adopted the report of the Reference Committee with corrections.

Dr. Masters continued —

At this point, I should mention that the 1971 House was told that it might be desirable to change the MSMS fiscal year end from November 30 to sometime in the Spring. The Finance Committee has consulted with our auditor, and a report will be made today to your Ways and Means Committee, Doctor Moses Chairman, by Doctor Griffin, Finance Chairman. Doctor Bass has activated the Ways and Means Committee for this purpose.

THE REFERENCE COMMITTEE on Ways & Means, John W. Moses, MD, Chairman, recommended "that the certified audit of the prior fiscal year be reviewed on a yearly basis by the Ways & Means Committee at the Spring Session of the House of Delegates."

The Committee commended the Treasurer and the Chairman of the Finance Committee and moved acceptance of the audit of November 30, 1971.

The Committee suggested "that the present system of per diem reimbursement for the legislative doctor of the week be continued."

THE HOUSE adopted the report of the Reference Committee.

Dr. Masters continued —

The next two or three items in The Council report I think will show to you that we are concerned for our future and are taking some bold steps. For example, just yesterday The Council evidenced its concern about our young people and new physicians taking an interest in organized medicine. We have authorized the MSMS insurance carrier to provide disability insurance to interns and residents who are associate members of MSMS. This would be an incentive to participate in organized medicine. The cost of this to each resident or intern, incidentally, is a phenomenally low $10 a year.

The second step that The Council took yesterday was to agree to seek a federal grant to provide for a preceptorship program for medical students, administered by the University of Michigan with the cooperation and support of the MSMS and the other two Michigan medical schools. This is a tangible result of our efforts to interest the medical students in private practice, particularly family practice, and exposes them to medicine as it is now practiced in Michigan, in the hope of encouraging their future participation.

All of these steps will make a contribution to better health care and we all realize that a unified organization will have more clout than a fractionated organization. Our President-Elect, Doctor John Coury, has a personal commitment which was received enthusiastically by The Council yesterday and I want him to tell you about it.

11. President-elect's remarks - John J. Coury, MD

Gentlemen, when I was elected to this office I was asked, "What are your goals during the next two years?" I have talked to Brooker and to different members of The Council, and the reason I am here today is apparently that I talked too much yesterday; so you are being punished."

I am not here as a Wesley Hall; I don't believe everything he said, but some of the things he said at the AMA are true, not about the AMA staff but about things going on around the country. I am primarily concerned in Michigan with the polarization of various regional medical groups. This is a serious problem. There have always been outstate and instate conferences. There is nothing wrong with this. I am disturbed at the polarization of various medical societies, instate and outstate. I am concerned with the polarization of members of the same medical society.

I am concerned about the separation of the younger members who are not members of the Society, and members of this Society. I am concerned with what medical students are thinking and saying, and I am sure most of you are too. If you subscribe to SAMA's Journal, you can see what many of these men are doing, and they are somewhat in the organization of medicine.

We are maintaining our membership level at about 7,900. We have gained a few each year. When you figure the number of men who graduate each year, we are not really getting any larger; we are staying the same. If we don't start increasing, or if we stay the same, with the number of graduates who come out each year we are not going to represent the majority.

This Phase II Alexander Grant Study, I think, you should look at and analyze very, very closely, because the answers that are given in this booklet that you received show that there is a difference when the age level reaches about 35 to 40 as to what is said about this organization, and the group 40 and above. I happen to be in the "above" group. I am not too old to have a few wild ideas, perhaps, and I am not too young to make them too wild; but I honestly feel that if there is any time in our history that we need unity, it is now and in the future.

I would like to challenge each one of you men to go back home and talk to nonmembers. Serve as an example, and get them to join. Whether you believe it or not, or whether the public believes it or not, I think it is important for the public and for good medicine that we have a very strong State Medical Society, because the standards of medicine in this country have mostly been led by our so-called political organizations, whether it be the MSMS or the AMA.

I would like to stop the polarization of the Council on Medical Staffs and the specialty societies. I think we all should be working together. We are splintering ourselves. I hope that in the near future (and it will take time, but we are willing to devote the time) we can meet with older members and younger members of our Society to see how they feel and how they analyze what the role of this Society is and should be.

I also want to sit down with medical students who are members and not members of SAMA, and see what they think and what we can offer. I want to go out into the areas and meet with nonmember practicing physicians and find out how they feel and why they don't belong. Most of those people are riding along on the fruits of this organization, and if there is something that can be done to entice them into this Society it should be done.

I would like to go around to most of the major hospital staffs and really sit down and have a nit-pickin' bull session with them and find out what we can do for them and how they can help us. We are not going to get rid of the Council on Medical Staffs, and we shoudn't. We are not going to get rid of the specialty societies, and we shouldn't; but I think it is damned soon - and we should do it soon - that we work together as a unit.

This is what I am devoting myself to in the next two years. I may not be successful, but if I can bring in one new member more than we might have otherwise, I think I will have accomplished something.

REFERENCE COMMITTEE "D", J. H. McLaughlin, MD, Chairman, thanked President-Elect John J. Coury, MD, for his timely remarks on the problems of polarization of medical groups and of problems related to membership in the MSMS.

THE HOUSE adopted the report of the Reference Committee.

Dr. Masters continued —

Now, I would like to make some personal observations and offer some recommendations to improve the effectiveness of MSMS.

I believe our members and potential members are looking to us for *dynamic* leadership. Change is being suggested. Change is really being demanded, as evidenced by our willingness to discuss peer review, and such concepts as bargaining, and by our consideration of new MSMS priorities.

Our base for a progressive future must be an informed membership. MSMS leadership must have a followship. Therefore, I recommend, and with The Council's approval, will appoint a membership committee whose primary purpose will be to promote participation in all three levels of organized medicine.

Further, I am going to recommend to The Council that a separate Department of Membership and Member Service be created within our staff structure. Mr. Tryloff assures me that such a Department is essential to our success. Too long have we neglected the nourishment of membership. We are experimenting now with new things but they need to be coordinated with visibility, accountability, and responsibility.

The proposed MSMS Membership Committee and Department must work in at least four major areas — recruitment of new members, orientation of those members, involvement of members on MSMS committees and in projects, and then retention of the members.

I am certain that we must listen in new systematic ways to our members. Therefore, I suggest we create the office of a Membership ombudsman. In addition to the listening and reporting by our staff, I feel that we need a doctor who will be concerned about their needs, their complaints, their suggestions, their aspirations. I think specific responsibility must be given to an ombudsman, whose responsibilty will be to monitor, listen and ascertain the mood and overall desires of the membership. The ombudsman (or ambassador) would channel these views to the MSMS leadership for consideration. A field staff may be necessary to facilitate the new work of the proposed Membership Committee and ombudsman.

As we think about our membership and efforts to make equal representation more meaningful, I recommend that this House take the initial steps to create a new Section on Academy Medicine to provide a voice for the many physicians at the three medical schools. All segments and fields of medicine, I feel, must have a voice in our policy decisions. The faculty members can make many unique contributions.

Our future as organized medicine certainly depends too upon the medical students, who soon will graduate, enter postgraduate training, and join us in providing medical care. I recommend that the House Committee on Constitution and Bylaws consider ways that these students could be invited to join MSMS as associate members with minimal dues but eligible for our member benefits. Since only three counties have medical schools within their boundaries and because the paperwork for student memberships would be an extreme burden on these county staffs, I propose that the students be able to obtain direct membership in MSMS.

Hand-in-hand with this, I also believe that interns and residents should be permitted to join MSMS direct. MSMS could return to the county societies any dues income now derived by the counties from interns and residents.

We all are glad to have student delegates in our House of Delegates, to have students on various MSMS committees, and to have a new active Liaison Committee with Medical Students. That committee will be meeting tonight in a joint session with our Education Liaison Committee to discuss several projects. Related to my concerns that students be encouraged to play larger roles in MSMS, I believe that we must involve more of our women doctors. I recommend that MSMS follow the suggestions made in Resolution 21 adopted by the AMA last year that female physicians be selected on their personal and professional qualifications, be nominated, elected and appointed to the committees and policy-making bodies of state and component societies.

Now permit me to shift to some challenges facing MSMS.

1. *Expansion of the medical schools.* MSMS has been working effectively in this area for more than a decade and this House last fall reaffirmed our position. And I know that we are telling this story more effectively, as we all beat down the myth that doctors have kept the supply of new physicians down.

2. *Distribution of physicians.* We know that just increasing numbers will not solve the shortages in many rural areas, some small towns, the inner cities, etc. I do not know the answers—Forced assignments? Special incentives? Satellite clinics? But I am sure that the collective wisdom of our members could develop some workable alternatives.

3. *Area-Wide health planning.* Physicians have been urged to be more active on such planning bodies. The problems seem insurmountable. But we do know that physicians must accept leadership responsibilities to solve some of the problems. Doctors can do a great deal to help solve the conflicts in our communities, the understandable hurdles of institutional pride, etc.

4. *Delivery of health care.* Would you please review the work of our MSMS committees and the resolutions adopted last fall, and then consider how MSMS might assume some better ways to study problems of the delivery of health care in Michigan. Many of our committees appropriately deal with internal operations. Over the years, other committees have focused on cardiac disease, maternal health, etc. Such work is part of the whole subject. How can we better study the complex problems concerning the delivery of health care to all the residents of Michigan? Send me your suggestions, please.

5. *Health education.* What is the responsibility of individual physicians and their organizations for health education? Should MSMS conduct workshops for teachers and school counselors? Should MSMS develop study guides? Should MSMS promote the fine AMA materials? And what priority does this type of activity deserve today?

I can easily add more challenges; and probably each of you would have a special subject to add.

Let me summarize now . . .

You will recall that I offered some recommendations about membership. In this regard all physicians must be united and all voices must be heard. The fractionation of medicine must not be permitted to continue, because no separate segment can accomplish anything as effectively as if we all work together.

My short list of five challenges facing medicine today is certainly incomplete. There are solutions, but they do require the attention of all doctors - and particularly of each delegate.

You delegates are the "Statesmen of Medicine in Michigan." Webster defines a statesman, as "one who shows unusual wisdom in treating or directing great public matters."

As statesmen you must define our positions and chart a course.

Repeatedly I am asked, "What does the Michigan State Medical Society stand for?"

How do you answer this question when it is raised by your associates?

It is your role as delegates to identify and define the broad policies which MSMS can work for and live under. We must be able to more effectively tell our members, the medical students and the public what MSMS believes in and stands for.

You have a good Council now and I urge you to leave the day-to-day direction up to The Council. They can make the administrative decisions based on broad policies set down by this House of Delegates.

We must unite our forces.

We must deal with vital issues in a positive way.

And I know this is possible.

REFERENCE COMMITTEE "B", D. Bonta Hiscoe, MD, Chairman, recommended that all members of the House and The Council actively support the program recommendations of the Chairman of The Council, Brooker L. Masters, MD:

1. **Establishment of a Department of Membership and Membership Services which would include the services of an ombudsman.**
2. **Expansion of our medical schools.**
3. **A search for methods to more effectively distribute our physicians.**
4. **Greater physician participation in area-wide health planning.**
5. **Search for more efficient ways to deliver health care.**
6. **Define the role of MSMS in health education.**

THE HOUSE adopted the report of the Reference Committee.

Extending the term of Michigan State Medical Society as a Michigan Corporation

At the conclusion of the regular Order of Business of the House of Delegates, Sidney Adler, MD, president, called the House of Delegates to order. A motion to extend the corporate term of Michigan State Medical Society in perpetuity was adopted by a vote of more than four-fifths of the delegates of the House of Delegates.

RESOLUTIONS

● RESOLUTION 72S-1

Separate Councilor for Oakland County
Edward E. Elder, Jr., MD, Oakland County

House Action: No Action

Whereas, the voting membership of the Oakland County Medical Society was 736 on January 1st, 1972, and

Whereas, Oakland County now has fifteen (15) delegates to the Michigan State Medical Society, and

Whereas, the constitution of the Michigan State Medical Society states a councilor will be elected for each ten (10) delegates, therefore be it

RESOLVED: That the Councilor Districts be changed so that Oakland County has a councilor of its own. (Bylaw change)

● RESOLUTION 72S-2

Submission of Resolutions
Wayne County Medical Society

House Action: Following Substitute Resolution Adopted in lieu of Resolution 72S-2

Whereas, the majority of the resolutions on the agenda of the House of Delegates of the Michigan State Medical Society are not submitted until the first session, and

Whereas, delegates should have ample opportunity to consider these resolutions prior to the meeting of the House and to discuss them with their constituents whom they represent; therefore be it

RESOLVED: That resolutions to the MSMS House of Delegates generally be submitted 30 days prior to the commencement of the session at which they are to be considered, and be it further

RESOLVED: That the Speaker of the House and the Committee on Rules and Order of Business be authorized to determine which resolutions are either urgent or important, and should be received after this deadline for presentation.

● RESOLUTION 72S-3

Meetings of the House of Delegates
Wayne County Medical Society

House Action: Adopted as Amended

Whereas, the delegates are often required to make decisions on crucial issues late in the evening of the last session of the House of Delegates of the Michigan State Medical Society, and

Whereas, decisions made under pressure and when fatigued may not be in the best interest of the Michigan State Medical Society, the physicians and their patients, and

Whereas, valuable time is wasted during the day because of the delay in receiving reference committee reports, and

Whereas, the majority of the delegates are available on the afternoon of the opening session, therefore be it

RESOLVED: That, where practicable, the first session of the House of Delegates of the Michigan State Medical Society be scheduled in the afternoon of the first day, and be it further

RESOLVED: That the schedule be arranged to include a minimum number of evening meetings, except for the Presidential inaugural.

● RESOLUTION 72S-4

Seating of Delegates
Robert D. Allaben, MD, Wayne County

House Action: Following Substitute Resolution Adopted in lieu of Resolution 72S-4. (The House passed on first reading these Bylaws changes. In accordance with Bylaws provisions, they will be laid over to the next Session.)

Whereas, some component medical societies of the Michigan State Medical Society elect their delegates to the House of delegates early in each calendar year and,

Whereas, the Michigan State Medical Society Bylaws state delegates are not seated until the "Annual Meeting," therefore be it

RESOLVED: That the Michigan State Medical Society Bylaws be changed in the following manner:

> 1) Chapter 9, Section 4: SEATING—TENURE . . . becomes a member of the House of Delegates when duly registered and seated at the first scheduled regular session following certification by the component society and remains a Delegate until the expiration of his term. . . .
>
> 2) Chapter 9, Section 6: MEETINGS—ANNUAL SESSION—The House of Delegates shall meet at least annually at the time and place of the Annual Session of this Society . . .

● RESOLUTION 72S-5

Establish Reimbursement for Levels of Care
Clifford W. Colwell, M.D., Genesee County

House Action: Adopted as Amended

Whereas, desired high quality medical care can only be offered to all the citizens of this country when adequate levels of care are established *and recognized.*

Whereas, repeated attempts have been made by both private and non-profit organizations to establish such levels of care, and

Whereas, less expensive extended care facilities and nursing home services are being denied because of regulation, wording and interpretation.

Whereas, just remuneration for such care has been denied by both private and governmental health insurance agencies, and

Whereas, such practices have been perpetuated on the public despite advice to the contrary by organized medicine, therefore be it

RESOLVED: That The Council of MSMS, through the Legal Affairs Committee, actively pursue and seek changes in federal and state regulations regarding payment of extended care costs, and be it further

RESOLVED: That MSMS delegates to the AMA be instructed to seek such changes on a national level through concerted AMA action.

● RESOLUTION 72S-6

Reassessment of American Medical Association Structure and Function
Jack R. Postle, MD, Northern Michigan

House Action: Adopted as Amended

Whereas, the recent call for a sweeping review of the structure and function of the AMA by its President, Dr. Wesley Hall, has met with considerable resistance from the established "traditionalists" among the AMA delegates and trustees, and

Whereas, it is, in fact, the feeling of a significant segment of the physicians in this country that they are inadequately represented by and rarely benefited from many existing AMA policies and programs, therefore be it

RESOLVED: That the House of Delegates of the MSMS firmly support the position that a reassessment of the AMA structure, function and purpose is urgent at this time, in order to better represent the physicians of this country.

● RESOLUTION 72S-7

Obstetrical Department Utilization
Alvin Bonzelaar, MD, Ottawa County

House Action: Adopted as Amended

In the 1971 annual report of Michigan Blue Cross, it was reported that in the Detroit area it now costs about $50,000 to provide a hospital bed, and further that it costs about $25,000 per year to maintain an occupied bed and $17,000 per year to maintain an unoccupied bed.

Whereas, it is recognized by all planner and hospital boards and administrators that the costs as described above represent a large initial and continuing cost outlay, and

Whereas, the public and all persons concerned recognize the need to reduce hospital costs, and

Whereas, many hospitals of all sizes have empty and unused obstetrical beds, and

Whereas, these empty beds represent large and significant hospital costs, and

Whereas, many hospitals could effectively use these obstetrical beds if it were not for the inconsistent and restrictive policies covering the use of such beds by the Michigan Department of Health, and

Whereas, many other states allow full utilization of obstetrical beds for clean gynecological and other types of clean surgical and medical cases, and

Whereas, the Michigan Department of Public Health clearly violates its reasons for keeping clean gynecological, surgical, and medical cases out of obstetrical departments when it allows any clean pregnant mother, regardless of reason for admission, to be admitted to the obstetrical department, therefore be it

RESOLVED: That the MSMS, through its Maternal Health Committee, request a full study of rules and policies of other states relative to the utilization of obstetrical beds for other than obstetrical cases, and that a full report on any problems occasioned by such use, both favorable and unfavorable be reported to the House of Delegates in the fall.

● RESOLUTION 72S-8

Sub-Specialty Certification in Radioisotopic Pathology by the American Board of Pathology
Leo W. Walker, MD, Section on Pathology

House Action: No Action (The House instructed the AMA delegates to concern themselves with the problems of certification in radioisotopic pathology by the American Board of Medical Specialties.)

Whereas, the American Board of Pathology submitted an application for sub-specialty certification in Radioisotopic Pathology to the American Board of Medical Specialties, and

Whereas, this application was in proper form and had been approved by the conjoined American Board of Nuclear Medicine, and

Whereas, this application together with a similar application from the American Board of Radiology was rejected on February 4, 1972, by the American Board of Medical Specialties, and

Whereas, rejection may create a serious hardship for many thousands of patients who depend on the use of radioisotopes for their diagnosis and continuing treatment as well as hundreds of pathologists and radiologists who use radioisotopes in their practices, and

Whereas, sponsorship of the conjoined American Board of Nuclear Medicine by the American Board of Pathology and the American Board of Radiology was based on commitments of support for their applications for sub-specialty certification in Radioisotopic Pathology and Radiology, and be it therefore

RESOLVED: That the Michigan State Medical Society endorses withdrawal of sponsorship of the conjoined American Board of Nuclear Medicine by the American Board of Pathology.

● RESOLUTION 72S-9

Electromyographic Needle Electrode Examinations

Jack R. Grommons, MD,
Section of Physical Medicine and Rehabilitation

House Action: Adopted

Whereas, electromyography is a clinical extension of the physician's examination, necessitating clinical knowledge of the disease processes, and

Whereas, it requires a knowledge of anatomy, neuroanatomy, and pathophysiology of neuromuscular skeletal lesions; therefore be it

RESOLVED: That electromyographic needle electrode examinations can only be performed by a licensed physician and cannot be performed and recorded by a non-physician and later reviewed by a licensed physician, and be it further

RESOLVED: That this resolution be distributed by the Michigan State Medical Society to all major third party providers of health care.

● RESOLUTION 72S-10

Medical Foundation Principles
Ralph R. Cooper, MD, Wayne County

House Action: No Action

Whereas, a cooperative effort of licensed Doctors of Medicine and Doctors of Osteopathy in Michigan can have a constructive effect on the future practice of medicine in this State and this objective can be achieved through the creation of a foundation, and

Whereas, such a foundation will have the right to establish standards of medical care, review physicians' practices, monitor fees, set up fee schedules, negotiate constructive agreements, and formulate rules and regulations binding on the participating physicians, and

Whereas, it is essential that physicians have a strong voice in the establishment of policies and procedures and that their rights be protected by democratic processes; therefore be it

RESOLVED: That the House of Delegates adopt the following Statement of Principles for the Medical Foundation of Physicians and be it further

RESOLVED: That the Articles of Incorporation and the Bylaws of Medical Programs, be amended so that they are in conformance with the principles enunciated in this statement.

Statement of Principles for the Medical Foundation of Michigan Physicians of Medicine and Osteopathy

FUNCTIONS:

1. To promote, facilitate and improve peer review:
    (a) By compiling and distributing necessary data to local medical foundations in the State of Michigan.
    (b) By serving in an advisory capacity to any regional foundation desirous of assistance.
    (c) By working with any local group on an interim basis until such a group has set up its own foundation and it is functioning adequately.
    (d) By carrying on pertinent foundation functions in areas where none is in operation and when requested by the local medical society.
    (e) By acting as an appellate and/or judicial group.
2. To negotiate contracts for its participating physicians, if not forbidden by the laws of the State of Michigan.

STRUCTURE

1. There shall be only one class of membership, and it shall be voluntary.

2. The privilege of voting shall be vested in the membership, and this privilege shall include the right to vote by mail and to designate proxies.
3. The members shall have the right:
   - (a) To nominate and elect members of the Board of Trustees.
   - (b) To amend the bylaws and to initiate such amendments.
   - (c) To approve all contracts binding on them before their acceptance or implementation.
   - (d) To dissolve the corporation by a two-thirds affirmative vote of all members.
   - (e) To recall an officer by a majority vote of the membership.
4. The Board of Trustees shall be composed of 32 members. The Michigan State Medical Society and the Michigan Osteopathic Association shall each appoint one Trustee. The thirty (30) additional members, pro rated among the licensed doctors of medicine and doctors of osteopathy, shall be elected by the membership on a regional basis apportioned according to the population of the State of Michigan.
5. The Board of Trustees shall elect a Chairman, Vice Chairman, Treasurer, and Secretary. The officers may be removed by the Board of Trustees but only for cause and in accordance with due process.
6. The Executive Secretary shall be a physician appointed by the Board of Trustees.
7. The Executive Committee shall be composed of the Chairman, Vice Chairman, Treasurer, Secretary and three other Trustees elected by the Board of Trustees.
8. Candidates for the office of Trustee shall be nominated on a regional basis by a committee appointed by the Board of Trustees and elected by the members by mail ballot on a regional basis as provided in the above item 4. Members shall have the right to nominate candidates by a petition signed by 25 members or more, received by the Corporation at least thirty (30) days prior to the election.
9. The quorum for meetings of the membership shall be ten (10) percent of the membership, present in person or by proxy.

● RESOLUTION 72S-11

AMA Membership Hearings

Donald N. Sweeny, Jr., MD, Wayne County

House Action: Adopted as Amended

Whereas, the American Medical Association is holding open hearings regarding structure and policy of its organization thereby airing problems and seeking solutions, and

Whereas, the Michigan State Medical Society should present a written summary at those hearings reflecting the opinion of its members; therefore be it

RESOLVED: That the Michigan State Medical Society through its Speaker appoint an ad hoc committee to meet in open session during the 1972 Annual Meeting of the Michigan State Medical Society to take testimony regarding these matters from its members, either as individuals or organizations, and that a written summary of this testimony be forwarded to the AMA Council on Long Range Planning and Development.

● RESOLUTION 72S-12

Peer Review to be Performed by the Michigan State Medical Society

Leland E. Holly II, MD, Muskegon County

House Action: No Action

Whereas, it is the purpose of MSMS to bring into one viable, effective organization the ethical physicians, licensed to practice in Michigan, in order that their contribution to human welfare will be enhanced, and

Whereas, it is the purpose of MSMS to aid Michigan physicians individually and collectively in maintaining high levels of ethical conduct and standards of practice to protect and serve the total public, and

Whereas, it is the purpose of MSMS to develop methods, techniques and practices that moderate the costs of quality medical and health care and provide for fair remuneration for services rendered, and

Whereas, MSMS has developed peer review and appeal mechanisms to serve these purposes, and

Whereas, there are developed MSMS programs to make these mechanisms, purposes and their logical consequences more meaningful and effective in the present political setting; therefore be it

RESOLVED: That all peer review functions and related functional extensions thereof be carried out by MSMS and, further, be it

RESOLVED: That The Council be directed to appoint an appropriate ad hoc committee and MSMS staff to formulate a program to achieve this objective for presentation for approval by the next House of Delegates.

● RESOLUTION 72S-13

In-Hospital Family Planning Education

L. E. Heideman, MD, Wayne County

House Action: Adopted as Amended

Whereas, the Michigan State Medical Society is dedicated to the promotion of all aspects of health, including health education, and

Whereas, education for family planning is an integral part of health education and essential for the promotion of the well-being of women, of the family and of society, and

Whereas, the effectiveness of the hospital in health education has been amply demonstrated in programs for newborn care and for prenatal care, and

Whereas, the presentation of program to hospitalized women on the subject of family planning is an optimal, logical and effective time for such information, therefore be it

RESOLVED: That MSMS endorses the concept that educational programs on family planning be made available to interested hospitalized patients as one technique of information dissemination in this vital area.

RESOLVED: That consultation help be available by Michigan State Medical Society to Michigan hospitals in the development and implementation of such programs, in cooperation with other interested agencies, and be it further

RESOLVED: That copies of this resolution be distributed to the president of the board, the administrator, the chief of staff, and the chief of obstetrics and gynecology of each Michigan hospital.

● RESOLUTION 72S-14

Call for Referendum on Question of Medical Programs, Incorporated

W. J. Liedel, MD, Monroe County

House Action: Disapproved

Whereas, the foundation known as Medical Programs, Inc. presently under study by the MSMS if implemented will affect every physician in every area of his practice of medicine, and

Whereas, it will be dependent upon broad acceptance and participation for its continued operation, and

Whereas, to secure this cooperation there must be either massive voluntary support or use of some form of coercion to secure wide spread participation, therefore be it

RESOLVED: That if and when the House of Delegates approves the Bylaws of the proposed foundation in their final form, the question of the establishment of the proposed foundation shall be submitted to the Society as a whole for its vote as provided in Chapter 15 Section 2 of the Constitution of Bylaws of the MSMS.

● RESOLUTION 72S-15

Relative Value Study Committee Report (Medicine Section)
John Bryan, MD, Oakland County

House Action: Following Substitute Resolution Adopted in lieu of Resolution 72S-15

Whereas, the final two sections of the 1971 RVS is now completed, and,

Whereas, changes in medical practices occur because of changes in technology and information, and

Whereas, there is a need for the continuing study of the RVS and added input from the specialty groups; therefore be it

RESOLVED: That the House of Delegates accept the RVS as submitted without approval of the Michigan Society of Internal Medicine and recommends usage by The Council; and be it further

RESOLVED: That recommendations of the RVS Committee continue with study on a periodic basis conforming to the Guidelines and instructions by the House of Delegates.

● RESOLUTION 72S-16

Proscription of MSMS Role in Blue Shield Activities
Leland E. Holly II, MD, Muskegon County

House Action: No Action

Whereas, the special 1971 spring meeting of the House of Delegates in Lansing clearly expressed its desire to disassociate from Blue Shield, and

Whereas, the fall House of Delegates meeting disapproved resolutions 51 and 58 which required an MSMS role in determining members of the Blue Shield corporate body, and

Whereas, the minutes of the January, 1972, meeting of the Council, Item 27, indicate uncertainty as to what role MSMS is to play relative to Blue Shield, be it therefore

RESOLVED: That discussion of membership of MSMS members on the Blue Shield corporate body or any other committee controlled by Blue Shield is not proper business for any official body of MSMS, and further be it

RESOLVED: That it is not proper for any officer of MSMS to participate in any Blue Shield activity in his official MSMS capacity, and further be it

RESOLVED: That Blue Shield business of any sort, excluding limited reports specifically germane to the business of MSMS, is not proper business for any official body of the MSMS.

● RESOLUTION 72S-17

Resolution Supporting the Concept of Certificate of Need Legislation and Urging Passage of Such Legislation
Glenn E. Moore, MD, Genesee County

House Action: No Action

Whereas, overbuilding of hospital beds and reduplication of services contribute significantly to the increased costs of health care, and

Whereas, these costs can be reduced by thorough planning efforts, and

Whereas, hospitals may now be licensed by meeting "bricks and mortar standards" only, without establishing need for additional beds, and

Whereas, certificate for need legislation would, in effect, require that hospital beds and services be planned and built in response to clearly evident needs consistent with principles used by the local comprehensive health planning boards, and

Whereas, certificate of need legislation would prevent unnecessary over-building and costly duplication of beds and services, therefore be it

RESOLVED: That the Michigan State Medical Society strongly endorse, in principle, the concept of certificate of need legislation and urge early passage of appropriate legislation.

● RESOLUTION 72S-18

A Separate Charter for Gratiot County as a Component County Medical Society
Jack Stack, MD, Gratiot County

House Action: Requested that The Council investigate the local situation and make a recommendation to the House of Delegates in order that it can act in accordance with the Bylaws of MSMS, Chapter 1, Section 2.

Whereas, the majority of physicians of Gratiot County and members of the staff of Gratiot Community Hospital have petitioned The Council of MSMS for a separate charter for Gratiot County to be a separate component medical society, therefore be it hereby

RESOLVED: That the MSMS House of Delegates approve the request for a separate charter for Gratiot County Medical Society.

● RESOLUTION 72S-19

Medicaid Payments for Patients with Psychiatric Diagnosis
Jack Stack, MD, Gratiot County

House Action: Adopted as Amended

Whereas, present policy of the Department of Social Services of the State of Michigan does not allow payment to physicians or hospitals for the care of Medicaid patients with psychiatric diagnoses and

Whereas, this policy discriminates against the mentally ill who are cared for by private practitioners, and

Whereas, this policy is inconsistent with federal standards for Title XIX, therefore be it

RESOLVED: That MSMS request administrative changes and/or legislation necessary to provide payment for the private care of Medicaid patients with psychiatric diagnoses by private physicians on both an in-patient and out-patient basis.

● RESOLUTION 72S-20

MSMS Support for Bill for Sex Education and Teaching Birth Control
Jack Stack, MD, Gratiot County

House Action: Adopted as Amended

Whereas, Michigan's present sex education law specifically prohibits the teaching of birth control, and

Whereas, young people have a great need for accurate information regarding reproduction and contraception, and

Whereas, the prevention of unwanted and unplanned pregnancy can be accomplished only by adequate information and availability of contraception, therefore be it

RESOLVED: That MSMS support legislation which would change the sex education law to allow the teaching of birth control.

● RESOLUTION 72S-21

Teen-Age Contraception
Jack Stack, MD, Gratiot County

House Action: Adopted as Amended

Whereas, there are many teen-age pregnancies in Michigan each year which are unplanned and unwanted and which result from the inability of young women to obtain contraceptive assistance and counseling, and

Whereas, parents may be unable or unwilling to provide suitable protective counsel to their children in this regard, and

Whereas, conscientious physicians and birth control clinics are reluctant to provide contraceptive assistance and counseling to minors, and

Whereas, previous legislation has been enacted to permit physicians to examine and treat minors without parental consent in suspected instances of venereal disease, and

Whereas, a bill has been introduced which would allow physicians to provide contraceptive assistance to minors without parental consent, therefore be it

RESOLVED: That MSMS express support for the intent of this bill and urge the Legislature to pass legislation which would allow physicians to provide contraceptive assistance and counsel to teen-agers without parental consent.

● RESOLUTION 72S-22

Blue Shield Payment for Elective Sterilization
Jack Stack, MD, Gratiot County

House Action: Adopted as Amended

Whereas, for two years the Michigan State Medical Society has requested that Blue Shield include payment for elective sterilization in all of their contracts; and

Whereas, there has been no positive response to this request; and

Whereas, both the Michigan State Medical Society and the general public recognize that the present policy of Blue Shield is discriminatory and arbitrary; and

Whereas, Blue Shield in a recent policy statement regarding vasectomy, rejected even the most serious contraindications to pregnancy in the woman as a "medical indication" for vasectomy in her husband; and

Whereas, implementation of a new policy for payment for elective voluntary sterilization could be accomplished without an increase in premium; therefore be it

RESOLVED: That Michigan State Medical Society reaffirms our request that Blue Shield pay for elective sterilization on an in-patient or an out-patient basis; and be it further

RESOLVED: That The Council appoint a committee to be instructed to work intensively with the Board of Blue Shield and others to try to accomplish this change in policy.

● RESOLUTION 72S-23

Change in Workmen's Compensation Rules and Regulations
H. M. Andre, MD, Kent County

House Action: Adopted

Whereas, rulings of the Referees for claims under Workmen's Compensation in this state tend to favor the plaintiff (Workman) versus the employer, and

Whereas, the result of this unfavorable climate causes the employer or industry to be reluctant to accept for employment any person who is mildly impaired physically or potentially mildly disabled, such as having a history of back pain, back surgery, or even wearing a back brace, or who has cardiac or pulmonary or other impairment, and

Whereas, many of these people under proper medical management are able to do useful work and thus contribute to society and continue as useful citizens, and

Whereas, it is desirable that the handicapped be employed, and

Whereas, the employer is willing but reluctant to hire such individuals because of this very unrealistic and unfair liability in the present climate, and

Whereas, this increasing number of unfortunate unemployed persons is creating an intolerable tax burden on industry and the state, now therefore be it

RESOLVED: That MSMS instruct The Council to use all possible means to accomplish revision of our laws so as to encourage employment of these persons without incurring the unfair responsibility for naturally occurring disease processes or aggravation of pre-existing conditions by a waiver mechanism.

● RESOLUTION 72S-24

MSMS Condemnation of Blue Shield Form 968—Pay Subscriber Form—Blue Shield Form 5505
Paul Rowe, MD, Bay-Arenac-Iosco County

House Action: Following Substitute Resolution Adopted in lieu of Resolution 72S-24

Whereas, there is verbal and widespread dissatisfaction among doctors of Michigan with Blue Shield Form 968 and Blue Shield Form 5505, therefore be it

RESOLVED: That The Council consider the feasibility of a single insurance claims form which can be adopted by all third party carriers, and that, if feasible, it take steps to develop and disseminate the form.

● RESOLUTION 72S-25

Medical Treatment of Neurologically Abnormal Children by Non-Physicians
Mark C. Levine, MD, Section of Neurology

House Action: Adopted as Amended

Whereas, the precise diagnosis of neurological disorders of infants and children, including relatively ill-defined clinical entities referred to as perceptual and/or learning problems, including minimal brain disfunction, is often very difficult, and requires the cooperation of several medical and paramedical disciplines, and

Whereas, such special diagnostic evaluations should be carried out only under direction of physicians, and

Whereas, all modalities of treatment including prescription of speech, physical, or occupational therapy may be carried out by trained personnel only under direction of a physician, therefore be it

RESOLVED: That in keeping with Resolution 47 approved by the House of Delegates in 1967, the Michigan State Medical Society remind the State Board of Education that when local boards of education evolve programs of diagnosis and therapy of children with so-called neurological disabilities, not under the direction of physicians, they are in violation of state licensing statutes, and be it further

RESOLVED: That the Michigan State Medical Society remind the Boards of Registration of licensed therapists participating in such programs that members of these groups are in violation of the law when engaging in programs of active therapy which are not prescribed by a physician.

● RESOLUTION 72S-26

Regional Election of AMA Delegates and Alternates
Edwin S. Woodworth, MD, Livingston County

House Action: No Action

Whereas, there is at present no obligation for Michigan's delegates to the AMA to communicate directly with the membership of the component medical society at the County level, and

Whereas, there is a recognized trend for younger medical practitioners to feel that the AMA does not represent their interests, and

Whereas, this feeling has led to a decreased participation, and allegedly to a decrease in membership, in the AMA, MSMS and County societies by these younger practitioners, and

Whereas, a precedent already exists both in The Council and in the Judicial Commission of the MSMS for selection of representatives on a regional basis, therefore be it

RESOLVED: That the Constitution of the MSMS, Chapter 9, Section 11, be amended in such a way that delegates to the AMA and their alternates are elected by the membership of MSMS on a regional basis, the regions being defined on the basis of physician membership members.

● RESOLUTION 72S-27

Physician Liability for Payment of Patient's Hospital Bills
C. Colwell, MD, Genesee County

House Action: Adopted as Amended

Whereas, a Pennsylvania Court has ruled that a physician was liable for payment of a patient's hospital bill where the insurance carrier (Blue Cross) refused payment for that portion of a hospital bill said to be for diagnostic rather than therapeutic reasons, and

Whereas, many third parties maintain arbitrary semantic distinctions between admissions for diagnostic and therapeutic purposes, and

Whereas, in most instances such arbitrary distinctions are not consistent with the delivery of high quality medical care, therefore be it

RESOLVED: That in disputed cases a decision as to the necessity of hospitalization and diagnostic procedures can only be made through the mechanism of meaningful review by the physician's peers.

REFERENCE COMMITTEES

SPRING MEETING

CONSTITUTION & BYLAWS

S. M. Gould, Jr., MD, Washtenaw, *Chairman*
Donald Bryan, MD, Wayne
Z. F. Endress, MD, Oakland
Frederick H. Lindenfeld, MD, Berrien
W. Patrick Mazier, MD, Proctology Section
David J. Millard, MD, Van Buren
Frank B. Walker, II, MD, Wayne

CREDENTIALS & TELLERS

Robert J. Toteff, MD, Saginaw, *Chairman*
Thomas Ganos, MD, Wayne
Robert C. Kettunen, MD, Kalamazoo
John W. MacKenzie, Jr., MD, Genesee
James A. McLean, MD, Allergy Section
Earl A. Rinkenberger, MD, Macomb
William F. Sutter, MD, Mason

"A" COMMITTEE

Richard McMurray, MD, Genesee, *Chairman*
Robert D. Allaben, MD, Wayne
Thomas E. Andrews, MD, Kalamazoo
Frederick S. Gillett, MD, Kent
Paul T. Lahti, MD, Oakland
Beverly C. Payne, MD, Washtenaw
Homer M. Smathers, MD, Wayne

"B" COMMITTEE

D. Bonta Hiscoe, MD, Ingham, *Chairman*
S. E. Chapin, MD, Wayne
Arthur F. Dundon, MD, Grand Traverse
Charles J. France, MD, Wayne
Richard R. Galpin, MD, Oakland
Glenn E. Moore, MD, Genesee
Richard Rasmussen, MD, Kent

"C" COMMITTEE

Francis P. Rhoades, MD, Wayne, *Chairman*
Harvey M. Andre, MD, Kent
Ned I. Chalat, MD, Wayne
Herbert W. Harris, MD, Ingham
Michael R. Shier, SAMA, MSU
Neal A. Vanselow, MD, Washtenaw
Edwin S. Woodworth, MD, Livingston

"D" COMMITTEE

J. H. McLaughlin, MD, Oakland, *Chairman*
James B. Blodgett, MD, Wayne
John W. Grigg, MD, Otolaryngology
Leland E. Holly, II, MD, Muskegon
Benjamin Jeffries, MD, Wayne
George T. Kelleher, MD, Calhoun
Frank W. Power, MD, Grand Traverse

WAYS & MEANS

John W. Moses, MD, Wayne, *Chairman*
T. M. Flake, MD, Wayne
Jack Hoogerhyde, MD, Kent
W. S. Jones, Jr., MD, Menominee
C. L. Oppy, MD, Roscommon
Jack R. Postle, MD, Northern Michigan
David Siegel, MD, Urology Section

RECORD OF ATTENDANCE

1972 MSMS House of Delegates
Spring Meeting

		Meetings	
	1st	2nd	3rd
OFFICERS			
Speaker:			
Vernon V. Bass, MD	x	x	x
Vice Speaker:			
James D. Fryfogle, MD	x	x	x
Immed. Past President:			
Robert J. Mason, MD	-	-	-
Secretary:			
Kenneth H. Johnson, MD	x	x	x
DELEGATES:			
ALLEGAN			
R. L. Plagenhoef, MD	x	x	x
ALPENA - ALCONA - PRESQUE ISLE			
Not Represented			
BARRY			
Robert J. Huebner, MD	x	x	x
BAY - ARENAC - IOSCO			
John T. Geneczko, MD	-	x	x
Paul W. Rowe, MD	x	-	-
BERRIEN			
F. Alan Kennedy, MD	x	x	x
Fredk. H. Lindenfeld, MD	x	x	x
BRANCH			
John J. Rick, MD	x	x	x
CALHOUN			
George T. Kelleher, MD	x	-	-
Russell C. Rowan, MD	-	-	-
S. A. Yannitelli, MD	x	x	-
CASS			
Not Represented			
CHIPPEWA - MACKINAC			
Not Represented			
CLINTON			
James M. Grost, MD	x	x	x
DELTA - SCHOOLCRAFT			
Donald N. Fitch, MD			
DICKINSON - IRON			
Paul L. Trump, MD	x	x	-
EATON			
Eber B. Sherman, MD	x	x	-
GENESEE			
Lawrence G. Bateman, MD	x	x	x
Clifford W. Colwell, MD	x	x	x
John W. MacKenzie, MD	x	x	x
Richard J. McMurray, MD	x	x	x
Glenn E. Moore, MD	x	x	x
Lewis L. Simoni, MD	x	x	x
Charles A. Thompson, MD	x	x	x
GOGEBIC			
John R. Franck, MD	x	x	x

	Meetings 1st	 2nd	 3rd
GRAND TRAVERSE - LEELANAU - BENZIE			
Arthur F. Dundon, MD	x	x	x
Frank H. Power, MD	x	x	x
GRATIOT - ISABELLA - CLARE			
Jack M. Stack, MD	x	x	-
HILLSDALE			
Clark B. Smith, MD	x	x	x
HOUGHTON - BARAGA - KEWEENAW			
Paul G. Goodreau, MD	x	x	x
HURON			
Charles W. Oakes, Jr., MD	x	x	x
INGHAM			
Thomas C. Blair, MD	x	x	x
H. W. Harris, MD	x	x	x
D. Bonta Hiscoe, MD	x	x	x
Charles O. Long, Jr., MD	x	x	x
George D. Stilwill, MD	x	x	x
Robert M. Stow, MD	x	x	x
IONIA - MONTCALM			
Robert E. Rice, MD	x	x	-
JACKSON			
Richard C. Deming, MD	x	x	x
Edward R. Weddon, MD	x	x	x
KALAMAZOO			
Thomas E. Andrews, MD	x	x	-
Douglas A. Haddock, MD	x	x	x
Thomas J. Reigel, MD	x	x	x
Adrian J. Neerken, MD	x	x	x
KENT			
Harvey M. Andre, MD	x	x	x
Fred C. Brace, MD	x	x	x
Frederick S. Gillett, MD	x	x	x
William Haeck, MD	x	x	x
Jack Hoogerhyde, MD	x	x	x
Joseph R. Lentini, MD	x	x	x
Jack G. Lukens, MD	x	x	x
Richard A. Rasmussen, MD	x	x	x
LAPEER			
Charles E. Conaway, MD	x	x	x
LENAWEE			
Marvin B. Wolf, MD	x	x	x
LIVINGSTON			
Edwin S. Woodworth, MD	x	x	x
LUCE			
Not Represented			
MACOMB			
Gerald W. Morris, MD	x	x	x
Orville W. Oughtred, MD	x	x	x
Earl A. Rinkenberger, MD	x	x	x
Thomas J. Setter, MD	x	x	x
MANISTEE			
Not Represented			
MARQUETTE - ALGER			
George M. Wilson, Jr., MD	x	x	x
MASON			
William F. Sutter, MD	x	x	x
MECOSTA - OSCEOLA - LAKE			
James, L. Tyson, MD	x	x	x
MENOMINEE			
William S. Jones, Jr., MD	x	x	x
MIDLAND			
Charles H. Willison, MD	x	x	x
MONROE			
Warren J. Liedel, MD	x	x	x
MUSKEGON			
Leland E. Holly, II, MD	x	x	x
H. Clay Tellman, MD	x	x	x
Thomas R. Busard, MD	x	x	x
NEWAYGO			
Not Represented			
NORTH CENTRAL			
Charles L. Oppy, MD	x	x	x
NORTHERN MICHIGAN			
Jack R. Postle, MD	x	x	x
OAKLAND			
Arnold L. Brown, MD	x	x	x
John B. Bryan, MD	x	x	x
Edward E. Elder, Jr., MD	x	x	x
Zachary F. Endress, MD	x	x	x
Richard R. Galpin, MD	x	x	x
Worth W. Henderson, MD	x	x	x
Keith M. Holmes, MD	x	x	x
Paul T. Lahti, MD	x	x	-
John H. McLaughlin, MD	x	x	x
Kenneth L. Urwiller, MD	x	x	x
Edwin J. Westfall, MD	x	x	x
Bruce D. Bauer, MD	x	-	-
Wm. E. Bauer, MD	-	x	x
OCEANA			
Willis A. Hasty, MD	x	x	x
ONTONAGON			
Not Represented			
OTTAWA			
Alvin Bonzelaar, MD	x	x	x
Melvin J. Frieswyk, MD	x	x	x
SAGINAW			
Richard Hausler, MD	x	x	x
Roy J. Gerard, MD	x	x	x
Robert E. Jardinico, MD	x	x	x
Robert J. Toteff, MD	x	x	x
ST. CLAIR			
Charles N. Hoyt, MD	x	x	-
Daniel J. Wilhelm, MD	x	x	x
ST. JOSEPH			
Not Represented			
SANILAC			
Not Represented			
SHIAWASSEE			
Henry T. Forsyth, MD	x	x	x
TUSCOLA			
Not Represented			
VAN BUREN			
David J. Millard, MD	x	x	x
WASHTENAW			
Clarence E. Crook, MD	x	x	-
Lyle D. Elliott, MD	x	x	x
Stuart M. Gould, MD	x	x	x
John W. Henderson, MD	x	x	x
Beverly C. Payne, MD	x	-	-
George H. Koepke, MD	x	x	x
Neal A. Vanselow, MD	x	-	-
Howard R. Williams, MD	x	x	x
Henry A. Scovill, MD	x	-	-
WAYNE			
Robert D. Allaben, MD	x	x	x
Richard D. Anslow, MD	x	x	x
Frank B. Bicknell, MD	x	x	x
Alexander Blain, III, MD	x	x	x
James B. Blodgett, MD	x	x	x
Brock E. Brush, MD	x	x	x
Donald I. Bryan, MD	x	x	x
Ned I. Chalat, MD	x	x	x
Sidney E. Chapin, MD	x	x	x
Paul J. Connolly, MD	x	x	x
Ralph E. Cooper, MD	x	x	x
John F. Cotant, MD	x	x	-
James C. Danforth, Jr., MD	x	x	x
Charles E. Darling, MD	x	x	x
Henry M. Domzalski, MD	x	x	x
Robert C. Douglass, MD	x	x	x
Thomas M. Flake, MD	x	x	x
C. Jackson France, MD	x	x	-
Eugene L. Freitas, MD	x	x	x
Thomas Ganos, MD	x	x	x
Robert H. Hamburg, MD	x	x	x
Louis F. Hayes, MD	x	x	x
Louis E. Heideman, MD	x	x	x
Jean H. Holdredge, MD	x	x	x
Andrew J. Hopkins, MD	x	x	x
Homer A. Howes, MD	x	x	x
Benjamin Jeffries, MD	x	x	x
James M. Kennary, MD	x	x	x
Conrad R. Lam, MD	x	x	x
Gerald H. Mandell, MD	x	x	x
Marjorie P. Meyers, MD	x	x	x
John W. Moynihan, MD	x	x	-
John W. Moses, MD	x	x	x
Arthur Z. Ostrowski, MD	x	x	-
Ralph R. Pino, MD	x	x	x
George F. Porretta, MD	x	x	x
Kenneth J. Ray, MD	x	-	x
Francis P. Rhoades, MD	x	x	-
Leon Rottenberg, MD	x	x	-
I. Walter Silver, MD	x	x	x
Homer M. Smathers, MD	x	x	x
Lee B. Stevenson, MD	x	x	-
Donald N. Sweeny, Jr., MD	x	x	x
Edward J. Tallant, MD	x	x	x
Arthur A. Ulmer, MD	x	x	x
Everal M. Wakeman, MD	x	x	x
Frank B. Walker, MD	x	x	x
Robert K. Whiteley, MD	x	x	x
Irwin A. Wilner, MD	x	x	-
Louis R. Zako, MD	x	x	x

	Meetings		
	1st	2nd	3rd
WEXFORD - MISSAUKEE Dennis E. VanAlst, MD	x	x	x
MEDICAL SCHOOLS:			
MICHIGAN STATE UNIVERSITY Michael R. Shier	x	x	x
WAYNE STATE UNIVERSITY Not Represented			
UNIVERSITY OF MICHIGAN Ellen Stubbs	x	x	x
SECTION DELEGATES:			
ALLERGY AND APPLIED IMMUNOLOGY James A. McLean, MD	x	x	x
ANESTHESIOLOGY William Jenson, MD			
DERMATOLOGY Not Represented			
GASTROENTEROLOGY Not Represented			
GENERAL PRACTICE James F. Dooley, MD	x	x	x
INTERNAL MEDICINE Klaus P. Schmidt, MD	x	-	-
NEUROLOGY Mark C. Levine, MD	x	x	x
NEUROLOGICAL SURGERY Not Represented			
OBSTETRICS - GYNECOLOGY Joseph Caruso, MD	x	x	x
OCCUPATIONAL MEDICINE Not Represented			
OPHTHALMOLOGY Maurice B. Wehr, MD	x	x	x
ORTHOPEDIC SURGERY Not Represented			
OTOLARYNGOLOGY John W. Grigg, MD	x	-	-
PATHOLOGY Edwin M. Knights, MD	x	x	-
PEDIATRICS Not Represented			
PHYSICAL MEDICINE Jack R. Grommons, MD	x	x	x
PLASTIC SURGERY Not Represented			
PROCTOLOGY Not Represented			
PSYCHIATRY Stephen C. Mason, III, MD	x	x	x
PUBLIC HEALTH & PREVENTIVE MEDICINE Winston B. Prothro, MD	x	x	x
RADIOLOGY Robert A. Songe, MD	x	x	-
SURGERY Michael N. Zelenock, MD	x	x	x
THORACIC SURGERY Not Represented			
UROLOGY David Siegel, MD	x	x	x

ATE NEWS FROM THE MICHIGAN STATE MEDICAL SOCIETY

Michigan Medicine

August 24, 1972, Volume 71, Number 25
Michigan State Medical Society

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CONDENSED SCHEDULE

Members Urged to Participate in '72 Annual Session; See Other Pages . . .

TUESDAY, OCTOBER 3

AFTERNOON CONCURRENT SESSIONS

Improved Utilization and Efficiency in the Emergency Department

Anatomy and Physiology of a Community Hospital Medical Staff

Medicine and Religion Workshop for Component Society Committee with MSMS Committee on Medicine and Religion

EVENING

Oktoberfest (Speaker's Reception, Grand Opening of the Exhibit Hall)

MSMS Annual Installation Dinner

WEDNESDAY, OCTOBER 4

MORNING CONCURRENT SCIENTIFIC SESSIONS

Surgical Scientific Program

Medical Practical Program

CONCURRENT LUNCHEONS

Immunological Deficiency Diseases

Win a Few, Lose a Few (Industrial Psychiatry)

Abnormalities in Cyclic Amp Metabolism in Psoriasis

AFTERNOON CONCURRENT POSTGRADUATE COURSES

Fainting

Strategies in the Diagnosis and Management of Patients with Recurrent Chest Pain

AFTERNOON AND EVENING CONCURRENT SCIENTIFIC SESSIONS

The Natural History and Practical Management of Renal Vascular Hypertension

Office Diagnosis of Gynecological Malignancy and a Current Look at Delivery Room Care

Low Back Pain—a Syndrome

Sexual Counseling and Family Counseling

Modern Post-Operative Care

Immunology and Diseases of the Digestive Tract

Management of Malignant Disease of Accessory Nasal Sinuses

Aseptic Necrosis in Congenital Dislocation of the Hip

Clinical Consequences of Environmental Abuse

Angiography in the Pediatric Age Group

Aneurysmal Bone Cyst, Menace or Myth

THURSDAY, OCTOBER 5

MORNING CONCURRENT SCIENTIFIC SESSIONS

Medical Scientific Program

Surgical Practical Program

Saphenous Aorto-Coronary Bypass, Prosthetic Valve Implantation, Braunwald-Cutter Prosthesis, Bacterial Endocarditis, Anterio Mediastinotomy, Trachea Resection, Acquired Tracheal Stenosis

CONCURRENT LUNCHEONS

Pathology Section and Michigan Society of Pathologists

Thoracic Surgery Section

The Management and Reconstruction Aspects of the Upper Third of the Face

AFTERNOON POSTGRADUATE COURSE

Surgical Approaches to Coronary Artery Disease

AFTERNOON AND EVENING CONCURRENT SCIENTIFIC SESSIONS

Non-Neoplastic Diseases of the Lung

Immunizations—1972

Multiple Sclerosis: Why, How, Now and When?

Dyslexia

Anesthetic Management of the Patient with Increased Intracranial Pressure

Drug Abuse: Historical and Neurophysiological Aspects

The Practical Aspects of Biomedical Communications

Medical Indication for Tracheal Intubation

Proctological Subject to be Announced

Please Use Handy Reservation Forms . . .

Scientific Program Offered Oct. 3 - 4 - 5; 24 MSMS Sections Arrange Special Activities; Please Use All Three Forms in This Issue . . .

Timely topics and outstanding speakers will combine to make the 1973 Annual Scientific Session in Detroit October 3-4-5 one of the very best.

Every MSMS member has been urged since early spring to block out the dates. Now, others hopefully will revise their office appointments and participate at least half a day in the fine program, set for the Sheraton-Cadillac Hotel.

Here is a condensed schedule of the program along with reservation blanks for the (1) hotel, (2) postgraduate courses, and (3) the many meal functions.

Physicians are urged to study the list of Section functions and come the same day that their specialty associates will be in Detroit.

THERE ARE SEVERAL new features this year, according to Co-Chairman Richard D. Judge, MD, Ann Arbor, and Robert L. Tupper, MD, Lansing.

A special program has been arranged for Tuesday afternoon, October 3 for all chiefs and vice chiefs of medical staffs, chiefs of clinical departments, and administrators of all Michigan MD and DO hospitals. The workshop is billed as "Anatomy and Physiology of a Community Hospital Medical Staff."

Another early-bird meeting on Tuesday afternoon will deal with "Improved Utilization and Efficiency in the Emergency Department." The MSMS Committee on Medicine and Religion will hold a workshop for representatives of component medical societies.

The Wednesday program is extensive with concurrent programs and two afternoon postgraduate courses on "Fainting" and another about "Strategies in the Diagnosis and Management of Patients with Recurrent Chest Pain."

One of the Wednesday features will be an expanded program this year for family physicians, about sexual and family counseling.

Again on Thursday the choice of subjects and speakers is broad along with one afternoon postgraduate course about "Surgical Approaches to Coronary Disease."

A new feature on Thursday will be an afternoon program about the "Practical Aspects of Biomedical Communications" arranged by the Michigan Chapter of the American Medical Writers Association.

MEETINGS OF SECTIONS

1. ALLERGY AND APPLIED IMMUNOLOGY
   Scientific program on Wednesday, Oct. 4
2. ANESTHESIOLOGY
   Scientific meeting on Thursday, Oct. 5
3. DERMATOLOGY
   Scientific and business meetings on Wednesday, Oct. 4
4. FAMILY PRACTICE
   Scientific and business meetings on Wednesday, Oct. 4
5. GASTROENTEROLOGY
   Scientific and business meetings on Wednesday, Oct. 4
6. INTERNAL MEDICINE
   Scientific and business meetings on Thursday, Oct. 5
7. NEUROLOGY
   Scientific and business meetings on Thursday, Oct. 5
8. NEUROLOGICAL SURGERY
   Scientific and business meetings on Wednesday, Oct. 4
9. OBSTETRICS-GYNECOLOGY
   Scientific meeting on Wednesday, Oct. 4
10. OCCUPATIONAL MEDICINE
    Scientific and business meetings on Wednesday, Oct. 4
11. OPHTHALMOLOGY
    Scientific and business meetings on Thursday, Oct. 5
12. ORTHOPEDIC SURGERY
    Scientific and business meetings on Wednesday, Oct. 4
13. OTOLARYNGOLOGY
    Scientific and business meetings on Wednesday, Oct. 4
14. PATHOLOGY
    Scientific and business meetings on Thursday, Oct. 5

15. PEDIATRICS
Scientific and business meetings on
Thursday, Oct. 5

16. PHYSICAL MEDICINE
Scientific and business meetings on
Wednesday, Oct. 4

17. PLASTIC SURGERY
Scientific and business meetings on
Thursday, Oct. 5

18. PROCTOLOGY
Scientific and business meetings on
Thursday, Oct. 5

19. PSYCHIATRY
Scientific and business meetings on
Thursday, Oct. 5

20. PUBLIC HEALTH AND PREVENTIVE MEDICINE
Scientific and business meetings on
Wednesday, Oct. 4

21. RADIOLOGY
Scientific and business meetings on
Wednesday, Oct. 4

22. SURGERY
Scientific and business meetings on
Wednesday, Oct. 4

23. THORACIC SURGERY
Scientific and business meetings on
Thursday, Oct. 5

24. UROLOGY
Scientific and business meetings on
Wednesday, Oct. 4

Registration Form For Annual Session Meal Functions

Reserve a place now at the various Annual Session luncheons, receptions and dinners, October 2-3-4 at the Sheraton-Cadillac Hotel, Detroit, by checking the various boxes on this form.

Please return this form to MSMS soon to facilitate early plans.

Tickets will be available at the Annual Session registration area and no advance checks are needed at this time, but your reservation is requested.

MSMS members, interns, residents, osteopathic physicians and special guests are invited to all the Annual Session programs and functions. There will be no registration fee.

Mail this form to:
MSMS Annual Session
Box 950
East Lansing, Mi 48823

MONDAY, OCTOBER 2

☐ MDPAC Annual Luncheon
12:00 noon

TUESDAY, OCTOBER 3

☐ Michigan Chapter, American College of Emergency Physicians
12:00 noon luncheon-meeting

☐ "The Oktoberfest"—Annual Session Grand Opening
6:00 p.m. reception

☐ MSMS Annual Installation Dinner
7:00 p.m.

WEDNESDAY, OCTOBER 4

☐ Section on Allergy and Applied Immunology
12:00 noon luncheon-meeting

☐ Section on Occupational Medicine
12:00 noon luncheon-meeting

☐ Section on Dermatology
12:00 noon luncheon-meeting

☐ Section of Orthopaedic Surgery
6:00 p.m. cocktails and dinner

☐ Section on Neurological Surgery
6:00 p.m. cocktails and dinner

☐ Section on Radiology and Michigan Radiological Society
6:00 p.m. cocktails and dinner

THURSDAY, OCTOBER 5

☐ Section of Pathology and Michigan Society of Pathologists
12:00 noon luncheon

☐ Section on Thoracic Surgery
12:00 noon luncheon

☐ Section on Plastic Surgery
12:30 p.m. luncheon-meeting

☐ Michigan Chapter, American College of Chest Physicians, Michigan Society of Thoracic Surgeons, and MSMS Section on Thoracic Surgery
5:00 p.m. reception; 6:00 p.m. dinner

☐ Section of Ophthalmology and Michigan Ophthalmological Society
6:00 p.m. cocktails and dinner

☐ Section on Psychiatry
6:30 p.m. cocktails and dinner

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SHERATON-CADILLAC HOTEL
DETROIT, MICHIGAN 48231

Three Half-Day PG Courses Set Oct. 4-5; Reserve Your Place

Registrations are being accepted now at MSMS for three postgraduate half-day courses during the MSMS Annual Session in Detroit.

The concurrent courses on Wednesday afternoon, Oct. 4 will deal with (1) "Fainting," and (2) "Strategies in the Diagnosis and Management of Patients with Recurrent Chest Pains."

The course on Thursday afternoon, Oct. 5 will focus on "Surgical Approaches to Coronary Artery Disease."

The courses will be held at the Sheraton-Cadillac Hotel, headquarters for the week-long Annual Session, with a registration fee of $10 for each of the courses. There will be no fee for residents, interns or students.

Irwin J. Schatz, MD, Ann Arbor, associate professor of internal medicine, heart stations, division of cardiology, University of Michigan Medical School is moderator for the Fainting course. He explains that five distinguished lecturers will discuss the "clinical manifestations and possible causes of fainting, together with an appraisal of the management of these conditions." Doctor Schatz continues, "We should be concerned with both the central nervous system causes of fainting

(Continued on Page 5)

Mail with Check to MSMS

REGISTRATION FORM FOR POSTGRADUATE COURSES

Please send this form, with check for $10 for each course, to MSMS Annual Session, Box 950, East Lansing, Mi 48823. There will be no registration fee for residents, interns or students.

WEDNESDAY, OCT. 4 (Afternoon)
(Concurrent Courses)

___ **PG Course in Fainting**

___ **Strategies in the Diagnosis and Management of Patients with Recurrent Chest Pains**

THURSDAY, OCT. 5 (Afternoon)

___ **Surgical Approaches to Coronary Artery Disease**

The courses will be held at the Sheraton-Cadillac Hotel, Detroit.

____
(Print Name)

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Address

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My check for $________ is enclosed.

No check is enclosed because I am a

Resident________, Intern________, Student________.

SHERATON-CADILLAC RESERVATION RATE CARD

Please make my reservation as checked below:

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Address__________ City__________ State__________

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Singles—$18.00-$20.50 ☐ $23.00-$25.00 ☐
Doubles—$25.00-$27.50 ☐ $30.00-$32.00 ☐
Twins—$25.00-$27.50 ☐ $30.00-$32.00 ☐

	One Bedroom	Two Bedroom
Suites — Small	$40.00 ☐	$60.00 ☐
Medium	$45.00 ☐	$65.00 ☐
Large	$50.00 ☐	$70.00 ☐

Display Rooms ....Medium — $25.00 ☐ Large — $29.00 ☐

Above daily rates are subject to change and bear 4% Michigan State Sales Tax.
Reservations held until 6:00 p.m., unless otherwise specified.
If room is not available at rate requested, reservation will be made at next available rate.

All Rooms Completely Air Conditioned and with TV.

FREE PARKING TO REGISTERED GUESTS

Continued: More About PG Courses

such as convulsive disorders, cardiac causes such as too slow or too rapid heart action, and miscellaneous causes such as occur in postural hypotension and various endocrine disorders."

The course about Recurrent Chest Pains will be directed by Daniel J. Fall, MD, clinical assistant professor of medicine, University of Michigan Medical Center. Four prominent medical educators will cover "the cardiovascular causes of recurrent chest pain which will include the history, coronary, geography and noninvasive techniques as well as the radiologic aspects, esophageal causes and the musculo skeletal causes of recurrent chest pains," according to Doctor Fall.

On Thursday, the one course about Surgical Approaches to Coronary Disease will be moderated by Sol D. Pickard, MD, staff physician, division of cardiovascular diseases, Henry Ford Hospital, Detroit. Four recognized medical authorities will discuss the selection of patients for aortocoronary bypass surgery, the assessment of such surgery in the postoperative patient, surgery for obstructive coronary disease, the recognition of surgical complications of acute MI, and circulatory assistance for shock after myocardial infarction.

All without Charge Except PG Courses

ALL ACTIVITIES ARE open to all MSMS members, without charge except the half-day postgraduate courses. The courses and all programs are without charge for interns and residents. As in the past, medical students are encouraged to attend the programs.

August 24, 1972 Vol. 71, No. 25

Michigan Medicine

MICHIGAN STATE MEDICAL SOCIETY

Published three times each month and four times in December and January, 38 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Mich. and at additional mailing offices. Yearly subscription rate, $9.00. Printed in USA. All communications should be addressed to the Publications Committee, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823 © 1972 Michigan State Medical Society. Phone: Area Code 517, 337-1351

EDITOR: HERBERT A. AUER

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Fine Array of Speakers Obtained for Annual Session in Detroit, Oct. 3-4-5

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ALTMAN, JULES, MD
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ANGLIN, WALTER M., MD
ARBULU, AGUSTIN, MD
ASUNCION, ZACARIAS G., JR., MD

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BAKER, OPHELIA P., MD
BARRETT, RAYMOND J., MD
BASS, LAWRENCE J., MD
BAUBLIS, JOSEPH V., MD
BAUM, GERALD, MD
BEAUREGARD, WILLIAM L., MD
BLACKHURST, ROBERT T., MD
BLUMENTHAL, FRANK S., MD
BOBLITT, DELBERT E., MD
BOOHER, CRAIG E., MD
BOOTH, ROBERT E., PhD
BUCKLEY, REBECCA H., MD

CAILLIET, RENE, MD
CARBECK, ROBERT B., MD
CHARLTON, MAURICE H., MD
CHERUP, NICHOLAS, MD
CLAPPER, MUIR, MD
CLIMIE ANDREW R. W., MD
COHEN, ALAN D., MD
COPPOLA, EDWARD D., MD
COYE, ROBERT D., MD
CRAMBLETT, HENRY G., MD
CYRUS, ANDREW E., MD

DALY, WALTER J., MD
DAVILA, JULIO C., MD
DEAN, GEORGE A., MD
DEMING, RICHARD C., MD
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DUVERNOY, WOLF F. C., MD

EISENBREY, ARTHUR B., MD

FALL, DANIEL J., MD
FINCH, DANIEL, MR.
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FOX, WINSLOW G., MD

GAGO, OTTO, MD
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GULLEN, GEORGE E., MR.

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HARM, JOHN P., MD
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HISSONG, CECELIA F., MD
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HOYT, WALTER A., JR., MD
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HUMES, JAMES J., MD

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KRAFT, SUMNER C., MD
KRIGBAUM, EDMUND M., MD
KOWALEWSKI, EDWARD J., MD
KURTZMAN, RAYMOND S., MD

LA BAN, MYRON M., MD
LAHTI, PAUL T., MD
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LATIMER, FREDERICK R., MD
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LINGEMAN, RALEIGH E., MD
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ATE NEWS FROM THE MICHIGAN STATE MEDICAL SOCIETY

Michigan Medicine

September 14, 1972, Volume 71, Number 26
Michigan State Medical Society

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OCT 4 1972

USE RESERVATION FORMS INSIDE

Annual Session Awaits Members . . .

EVERY MEMBER is urged to try to participate in some part of the 1972 MSMS Annual Scientific Session in Detroit, Oct. 3-4-5.

THE 4,700 MEMBERS in Wayne and surrounding counties are challenged to revise their office appointments if necessary and attend the events at the Detroit Sheraton-Cadillac Hotel.

THE CONDENSED SCHEDULE for Tuesday afternoon, Oct. 3, and all day Wednesday and Thursday, Oct. 4 and 5 was mailed in August to all MSMS members. Many mailings have been made to different specialties, etc.

THERE ARE SEVERAL new features this year, according to Co-Chairmen Richard D. Judge, MD, Ann Arbor, and Robert L. Tupper, MD, Lansing.

A SPECIAL PROGRAM has been arranged for Tuesday afternoon, Oct. 3 for all chiefs and vice chiefs of medical staffs, chiefs of clinical departments, and administrators of all Michigan MD and DO hospitals. The workshop is billed as "Anatomy and Physiology of a Community Hospital Medical Staff." Another early-bird meeting on Tuesday afternoon will deal with "Improved Utilization and Efficiency in the Emergency Department." The MSMS Committee on Medicine and Religion will hold a workshop for representatives of component medical societies.

THE WEDNESDAY PROGRAM is extensive with concurrent programs and two afternoon postgraduate courses on "Fainting" and another about "Strategies in the Diagnosis and Management of Patients with Recurrent Chest Pain." One of the Wednesday features will be an expanded program this year for family physicians, about sexual and family counseling.

AGAIN ON THURSDAY the choice of subjects and speakers is broad along with one afternoon postgraduate course about "Surgical Approaches to Coronary Disease." A new feature on Thursday will be an afternoon program about the "Practical Aspects of Biomedical Communications" arranged by the Michigan Chapter of the American Medical Writers Association.

House of Delegates Set . . .

A BUSY, IMPORTANT SESSION is planned for the MSMS House of Delegates in Detroit October 1-2-3. Reports will be studied, resolutions considered, awards presented, leaders elected, and speakers heard. Speaker Vernon

(Continued on Page 3)

Use Annual Session Reservation Forms . .

Registration Form
For Annual Session Meal Functions

Please return this form to MSMS soon to facilitate early plans.

Tickets will be available at the Annual Session registration area and no advance checks are needed at this time, but your reservation is requested.

MSMS members, interns, residents, osteopathic physicians and special guests are invited to all the Annual Session programs and functions. There will be no registration fee.

Mail this form to:
MSMS Annual Session
Box 950
East Lansing, Mi 48823

____
(Print Name)

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Address

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MONDAY, OCTOBER 2

☐ MDPAC Annual Luncheon
12:00 noon

TUESDAY, OCTOBER 3

☐ Michigan Chapter, American College of Emergency Physicians
12:00 noon luncheon-meeting

☐ "The Oktoberfest"—Annual Session Grand Opening
6:00 p.m. reception

☐ MSMS Annual Installation Dinner
7:00 p.m.

WEDNESDAY, OCTOBER 4

☐ Section on Allergy and Applied Immunology
12:00 noon luncheon-meeting

☐ Section on Occupational Medicine
12:00 noon luncheon-meeting

☐ Section on Dermatology
12:00 noon luncheon-meeting

☐ Section of Orthopaedic Surgery
6:00 p.m. cocktails and dinner

☐ Section on Neurological Surgery
6:00 p.m. cocktails and dinner

☐ Section on Radiology and Michigan Radiological Society
6:00 p.m. cocktails and dinner

THURSDAY, OCTOBER 5

☐ Section of Pathology and Michigan Society of Pathologists
12:00 noon luncheon

☐ Section on Thoracic Surgery
12:00 noon luncheon

☐ Section on Plastic Surgery
12:30 p.m. luncheon-meeting

☐ Michigan Chapter, American College of Chest Physicians, Michigan Society of Thoracic Surgeons, and MSMS Section on Thoracic Surgery
5:00 p.m. reception; 6:00 p.m. dinner

☐ Section of Ophthalmology and Michigan Ophthalmological Society
6:00 p.m. cocktails and dinner

☐ Section on Psychiatry
6:30 p.m. cocktails and dinner

REGISTRATION FORM FOR POSTGRADUATE COURSES

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(Concurrent Courses)

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___ Strategies in the Diagnosis and Management of Patients with Recurrent Chest Pains

THURSDAY, OCT. 5 (Afternoon)

___ Surgical Approaches to Coronary Artery Disease

The courses will be held at the Sheraton-Cadillac Hotel, Detroit.

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(Continued on Page 6)

Participate in '72
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Modern Post-Operative Care
Immunology and Diseases of the Digestive Tract
Management of Malignant Disease of Accessory Nasal Sinuses
Aseptic Necrosis in Congenital Dislocation of the Hip
Clinical Consequences of Environmental Abuse
Angiography in the Pediatric Age Group
Aneurysmal Bone Cyst, Menace or Myth

THURSDAY, OCTOBER 5

MORNING CONCURRENT SCIENTIFIC SESSIONS

Medical Scientific Program
Surgical Practical Program
Saphenous Aorto-Coronary Bypass, Prosthetic Valve Implantation, Braunwald-Cutter Prosthesis, Bacterial Endocarditis, Anterio Mediastinotomy, Trachea Resection, Acquired Tracheal Stenosis

CONCURRENT LUNCHEONS

Pathology Section and Michigan Society of Pathologists
Thoracic Surgery Section
The Management and Reconstruction Aspects of the Upper Third of the Face

AFTERNOON POSTGRADUATE COURSE

Surgical Approaches to Coronary Artery Disease

AFTERNOON AND EVENING CONCURRENT SCIENTIFIC SESSIONS

Non-Neoplastic Diseases of the Lung
Immunizations—1972
Multiple Sclerosis: Why, How, Now and When?
Dyslexia
Anesthetic Management of the Patient with Increased Intracranial Pressure
Drug Abuse: Historical and Neurophysiological Aspects
The Practical Aspects of Biomedical Communications
Medical Indication for Tracheal Intubation
Colonoscopy for the Proctologists

dillac Hotel, Detroit, for their own hotel
g, because hotel is holding block of rooms.

tablets, and other preparations which contain some aspirin. "All samples from the representatives of pharmaceutical companies, etc., on hand must be checked immediately to be sure they meet these new child protection packaging standards. Those that don't must be disposed of or transferred to approved child resistant containers before they can be dispensed," Doctor Reizen warns. By October 24, not only products containing aspirin but all preparations containing any part of a substance considered potentially hazardous to children must be dispensed in child resistant containe

TO CLARIFY A QUESTION about Michigan Blue Shield policy re questions referred to local peer review committees, Louis F. Hayes, MD, senior vice-president of MMS, said, "Under the MVF Program, Michigan Blue Shield has a responsibility for paying a reasonable charge for any covered service. When a charge by a non-participating physician is in excess of their prevailing screen, they attempt to resolve the difference by discussion with the physician. If this process produces no resolution, they routinely refer such cases to local Peer Review Committees for fee adjudication. In such individual cases of fee ajudication, Blue Shield has committed to accepting the decision of the Peer Review Committee."

THE NEW MSMS CAR LEASING program was explained in a mailing to all members on August 28. Rates quoted are predicated upon a two-year closed-end leas and reportedly will save between $10 and $30 per month depending on make and model.

THE MSMS COUNCIL has taken a stand that "MSMS not support Michigan Blue Shield in its efforts to divide the surgical fee, but support the concept that physicians should be paid for services rendered. Shield had asked that MSMS support its attempts to divide the global surgical fee.

SERVICES WERE HELD September 5 for G. Thomas McKean, MD, 63, who died unexpectedly of a heart attack at his Grosse Pointe Farms home, Aug. 31. He was president of Michigan Blue Shield in 1959 and 1960.

MARJORIE PEEBLES MEYERS, MD, Detroit, recently was honored by MAP as the "Professional Woman of the Year."

IN AN OPINION prepared for the MSMS Council, MSMS Legal Counsel A. Stewart Kerr, reviewed the recent decisions of the Michigan Court of Appeals rulings on two unrelated abortion cases and called for "a period of watchful waiting by the medical profession."

September 14, 1972 Vol. 71, No. 26

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Medicine

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Michigan Medicine

OFFICIAL JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY • VOLUME 71, NUMBER 27 • SEPTEMBER, 1972

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OCT 4 1972

To
Progress

Michigan State
Medical Society
107th Annual
Scientific Session
Oct. 3-5 1972 Detroit

The negative power of clinically significant anxiety in angina pectoris...
This man feels he is living on borrowed time.

During anginal attacks, patients may suffer intense apprehension. More frequently, however, they experience a continuing sense of less severe but nonetheless disproportionate anxiety.

Reduction of such clinically significant anxiety is important, since undue emotional stress may precipitate further anginal episodes.

Adjunctive Librium (chlordiazepoxide HCl) may be especially suitable for relief of clinically significant anxiety and emotional tension in anginal patients because of its generally prompt therapeutic effectiveness and wide margin of safety. In a recent double-blind randomized study,* Librium (chlordiazepoxide HCl) was administered for relief of moderate anxiety in 20 anginal patients seen in office practice over a 20-week period. Symptoms of emotional distress related to anxiety were rated at base-line, one week, two weeks and monthly thereafter. Relief was obtained notably early in therapy. The clinical results demonstrated that Librium offers the coronary patient an antianxiety drug that, in the author's opinion, is both effective and safe. In general use, the most common side effects reported have been drowsiness, ataxia and confusion, particularly in the elderly and debilitated. (See summary of prescribing information.)

Librium (chlordiazepoxide HCl) is used concomitantly with certain specific medications of other classes of drugs, such as cardiac glycosides, diuretics and antihypertensive agents, whenever anxiety is clinically significant. The drug should be discontinued after anxiety has been reduced to appropriate levels.

The positive power of adjunctive

Librium®

(chlordiazepoxide HCl)

10-mg, 25-mg capsules
up to 100 mg daily

for moderate to severe anxiety accompanying angina pectoris

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of anxiety and tension occurring alone or accompanying various disease states.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Supplied: Librium® Capsules containing 5 mg, 10 mg or 25 mg chlordiazepoxide HCl. Libritabs® Tablets containing 5 mg, 10 mg or 25 mg chlordiazepoxide.

*Levine, S.: "Angina Pectoris and Emotional Overlay," Scientific Exhibit presented at the Annual Meeting of the Maine Medical Association, Kennebunkport, Me., June 13-15, 1971.

A copy of the Levine study may be obtained from your Roche representative.

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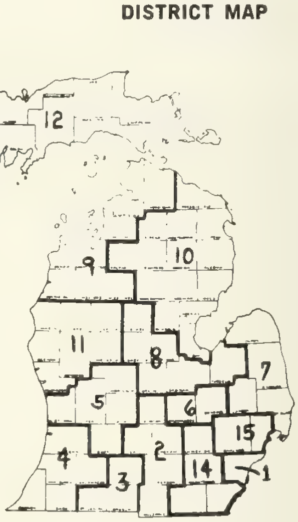
Tenth District Councilor: Robert C. Prophater, MD, Bay City
Counties: Alpena-Alcona-Presque Isle, Bay-Arenac-Iosco, North Central Counties, (Otsego, Montmorency, Crawford, Oscoda, Roscommon, Ogemaw, Gladwin and Kalkaska, combined)
Eleventh District Councilor: Brooker L. Masters, MD, Fremont
Counties: Mason, Mecosta-Osceola-Lake, Muskegon, Newaygo, Oceana
Twelfth District Councilor: Raymond Hockstad, MD, Escanaba
Counties: Chippewa-Mackinac, Delta-Schoolcraft, Luce, Marquette-Alger
Thirteenth District Councilor: Donald T. Anderson, MD, Wakefield
Counties: Dickinson-Iron, Gogebic, Houghton-Baraga-Keweenaw, Menominee, Ontonagon
Fourteenth District Councilor: Donato F. Sarapo, MD, Adrian
Counties: Lenawee, Livingston, Monroe, Washtenaw
Fifteenth District Councilor: Sydney Scher, MD, Mount Clemens
Counties: Macomb, Oakland

COUNCILOR DISTRICT MAP



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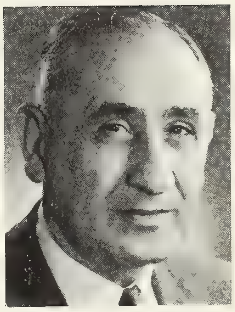
President's page



Sidney Adler, MD
MSMS President

As president, I want to personally invite each member to participate in the Michigan State Medical Society Annual Session in Detroit, October 1-5.

Once again, the House of Delegates will be in session Sunday through Tuesday, this year on October 1-2-3.

The Scientific Session has always followed the House in the past, but this year three programs have been scheduled for Tuesday afternoon to overlap with the House session, so the dates are October 3-4-5.

An outstanding scientific program has been arranged in Detroit and conferring with experts who will present new knowledge will be well worth your time. The program is planned to provide many opportunities for discussion in regard to diagnosis and treatment.

Concerned Michigan State Medical Society members are especially invited to make their views known about the operation of the American Medical Association at a special hearing to be conducted Monday, October 2. Members of the American Medical Association Committee on Long-Range Planning will be present. There will be three separate sessions. This is your opportunity to make your views known. Details appeared in the recent Medigram. Members are invited to present constructive ideas and facts on ways to improve the American Medical Association in order to make it more meaningful at the "grass roots level."

The House of Delegates format has been changed to improve the total operation. It will add several hours for the Delegates. The starting time this year has been advanced from Sunday night to Sunday afternoon.

The entire subject of uniform fee schedules should be re-evaluated in view of all the governmental programs.

An important subject facing the 1972 House of Delegates will be consideration of the pros and cons of mandatory postgraduate medical education. The ad hoc task force created by the 1971 House is ready to report to the delegates.

Delegates will have had more time this year to discuss resolutions back home because the house at the spring meeting ruled that resolutions must be submitted 30 days before the session.

If any of you feel that you have no opportunity to make your views known, come to Detroit for one day, Monday, October 2 when you will be able to testify before the American Medical Association Long-Range Planning Committee and also discuss proposed resolutions before the Michigan State Medical Society House Reference Committees.

The House of Delegates is your forum to discuss the problems facing the consumer as well as the physician in the area of the distribution and delivery of health care.

See you in Detroit!

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Publication of **Michigan Medicine** is under the direction of the Publication Committee, Michigan State Medical Society. The scientific editor is responsible for the scientific content. The managing editor is responsible for the production, correspondence and contents of the journal. He and the executive editor share final responsibility of the entire publication.

Neither the editors nor the state medical society will accept responsibility for statements made or opinions expressed by any contributor in any article or feature published in the pages of the journal. In editorials, the views expressed are those of the writer and not necessarily official positions of the society.

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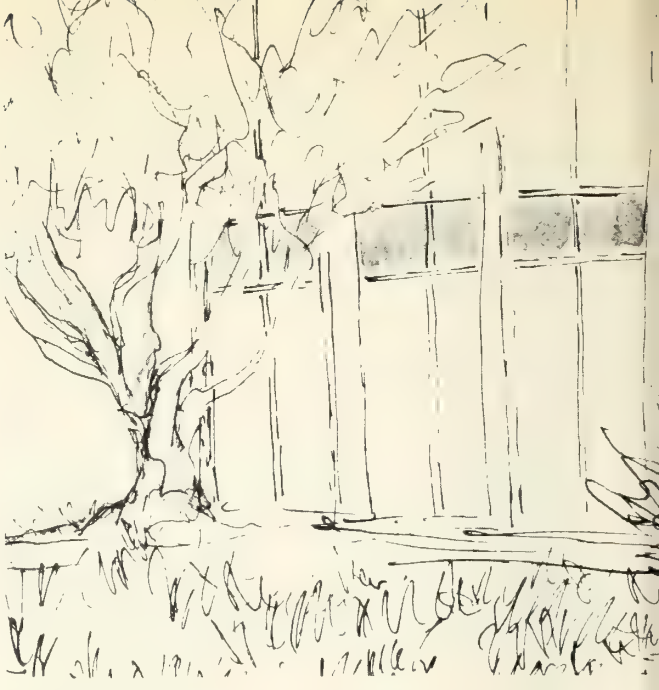

Michigan Medicine

Devoted to the interests of the medical profession and public health in Michigan.

INFORMATION FOR CONTRIBUTORS

1. Address scientific manuscripts to the Publication Committee, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. Submit original, double-spaced typewritten copy and two carbon copies or photo copies on letter size ($8\frac{1}{2}$ x 11 inch) paper. On page one, include title, authors, degrees, academic titles, and any institutional or other credits.
2. Authors are responsible for all statements, methods, and conclusions. These may or may not be in harmony with the views of the Editorial Staff. It is hoped that authors may have as wide a latitude as space available and general policy will permit. The Publication Committee expressly reserves the right to alter or reject any manuscript, or any contribution, whether solicited or not.
3. Illustrations should be submitted in the form of glossy prints or original sketches from which reproductions will be made by **Michigan Medicine**.
4. Articles should ordinarily be less than four printed pages in length (3000 words).
5. References should conform to *Cumulative Index Medicus*, including, in order: Author, title, journal, volume number, page, and year. Book references should include editors, edition, publisher, and place of publication, as well.
6. The editors welcome, and will consider for publication, letters containing information of interest to Michigan physicians, or presenting constructive comment on current controversial issues. News items and notes are welcome.
7. It is understood that material is submitted for exclusive publication in **Michigan Medicine**.

MICHIGAN MEDICINE is the official organ of the Michigan State Medical Society, published under the direction of the Publication Committee. Published three times a month, except four times in December and January, 38 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Mich. and at additional mailing offices. Yearly subscription rate, $9.00; single copies, 80 cents. Additional postage: Canada, $1.00 per year; Pan-American Union, $2.50 per year; Foreign, $2.50 per year. Printed in USA. All communications relative to manuscripts, advertising, news, exchanges, etc., should be addressed to Judith Marr, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. Phone Area Code 517, 337-1351. © 1972 Michigan State Medical Society.

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Since sulfonylureas promote the release of insulin which is lipogenic and helps transport glucose into adipose tissue…

And since many overweight patients already have normal or high levels of endogenous insulin, why not consider DBI-TD?

It lowers blood sugar without stimulating insulin secretion from the pancreas. And this may be important to the dieting diabetic.

In adult-onset, nonketotic diabetics uncontrolled by diet alone…

DBI-TD® Geigy
phenformin HCl

lowers blood sugar without raising blood insulin.

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Tablets of 25 mg.
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Capsules of 50 and 100 mg.

Indications: Stable adult diabetes mellitus; sulfonylurea failures, primary and secondary; adjunct to insulin therapy of unstable diabetes mellitus.

Contraindications: Diabetes mellitus that can be regulated by diet alone; juvenile diabetes mellitus that is uncomplicated and well regulated on insulin; acute complications of diabetes mellitus (metabolic acidosis, coma, infection, gangrene); during or immediately after surgery where insulin is indispensable; severe hepatic disease; renal disease with uremia; cardiovascular collapse (shock); after disease states associated with hypoxemia.

Warnings: Use during pregnancy is to be avoided.

Precautions: 1. *Starvation Ketosis:* This must be differentiated from "insulin lack" ketosis and is characterized by ketonuria which, in spite of relatively normal blood and urine sugar, may result from excessive phenformin therapy, excessive insulin reduction, or insufficient carbohydrate intake. Adjust insulin dosage, lower phenformin dosage, or supply carbohydrates to alleviate this state. **Do not give insulin without first checking blood and urine sugar.**
2. *Lactic Acidosis:* This drug is not recommended in the presence of azotemia or in any clinical situation that predisposes to sustained hypotension that could lead to lactic acidosis. To differentiate lactic acidosis from ketoacidosis, periodic determinations of ketones in the blood and urine should be made in diabetics previously stabilized on phenformin, or phenformin and insulin, who have become unstable. If electrolyte imbalance is suspected, periodic determinations should also be made of electrolytes, pH, and the lactate-pyruvate ratio. The drug should be withdrawn and insulin, when required, and other corrective measures instituted immediately upon the appearance of any metabolic acidosis.
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Adverse Reactions: Principally gastrointestinal; unpleasant metallic taste, continuing to anorexia, nausea and, less frequently, vomiting and diarrhea. Reduce dosage at first sign of these symptoms. In case of vomiting, the drug should be immediately withdrawn. Although rare, urticaria has been reported, as have gastrointestinal symptoms such as anorexia, nausea and vomiting following excessive alcohol intake.
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For complete details, including dosage, please see full prescribing information.

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a new outlook in chronic pain

of moderate to severe intensity

Though Talwin® Tablets, brand of pentazocine (as hydrochloride), can be compared to codeine in analgesic efficacy, Talwin is not subject to narcotic controls. Patients receiving Talwin Tablets for prolonged periods face fewer of the consequences you've come to expect with meperidine or codeine. And that, in the long run, can mean a better outlook for your chronic-pain patient.

Talwin Tablets are:

- **Comparable to codeine in analgesic efficacy:** one 50 mg. Talwin Tablet appears equivalent in analgesic effect to 60 mg. (1 gr.) of codeine. Onset of significant analgesia usually occurs within 15 to 30 minutes. Analgesia is usually maintained for 3 hours or longer.
- **Tolerance not a problem:** tolerance to the analgesic effect of Talwin Tablets has not been reported, and no significant changes in clinical laboratory parameters attributable to the drug have been reported.
- **Dependence rarely a problem:** during three years of wide clinical use, only a few cases of dependence have been reported. In prescribing Talwin for chronic use, the physician should take precautions to avoid increases in dose by the patient and to prevent the use of the drug in anticipation of pain rather than for the relief of pain.
- **Not subject to narcotic controls:** convenient to prescribe—day or night—even by phone.
- **Generally well tolerated by most patients:** infrequently cause decrease in blood pressure or tachycardia; rarely cause respiratory depression or urinary retention; seldom cause diarrhea or constipation. If dizziness, lightheadedness, nausea or vomiting are encountered, these effects tend to be self-limiting and to decrease after the first few doses. (See last page of this advertisement for a complete discussion of adverse reactions and a brief discussion of other Prescribing Information.)

50 mg. Tablets

Talwin®

brand of

pentazocine (as hydrochloride)

the long-range analgesic

a new outlook in chronic pain

of moderate to severe intensity

Contraindications: Talwin, brand of pentazocine (as hydrochloride), should not be administered to patients who are hypersensitive to it.

Warnings: *Head Injury and Increased Intracranial Pressure.* The respiratory depressant effects of Talwin and its potential for elevating cerebrospinal fluid pressure may be markedly exaggerated in the presence of head injury, other intracranial lesions, or a preexisting increase in intracranial pressure. Furthermore, Talwin can produce effects which may obscure the clinical course of patients with head injuries. In such patients, Talwin must be used with extreme caution and only if its use is deemed essential.

Usage in Pregnancy. Safe use of Talwin during pregnancy (other than labor) has not been established. Animal reproduction studies have not demonstrated teratogenic or embryotoxic effects. However, Talwin should be administered to pregnant patients (other than labor) only when, in the judgment of the physician, the potential benefits outweigh the possible hazards. Patients receiving Talwin during labor have experienced no adverse effects other than those that occur with commonly used analgesics. Talwin should be used with caution in women delivering premature infants.

Drug Dependence. There have been instances of psychological and physical dependence on parenteral Talwin in patients with a history of drug abuse and, rarely, in patients without such a history. Abrupt discontinuance following the extended use of parenteral Talwin has resulted in withdrawal symptoms. There have been a few reports of dependence and of withdrawal symptoms with orally administered Talwin. Patients with a history of drug dependence should be under close supervision while receiving Talwin orally.

In prescribing Talwin for chronic use, the physician should take precautions to avoid increases in dose by the patient and to prevent the use of the drug in anticipation of pain rather than for the relief of pain.

Acute CNS Manifestations. Patients receiving therapeutic doses of Talwin have experienced, in rare instances, hallucinations (usually visual), disorientation, and confusion which have cleared spontaneously within a period of hours. The mechanism of this reaction is not known. Such patients should be very closely observed and vital signs checked. If the drug is reinstituted it should be done with caution since the acute CNS manifestations may recur.

Usage in Children. Because clinical experience in children under 12 years of age is limited, administration of Talwin in this age group is not recommended.

Ambulatory Patients. Since sedation, dizziness, and occasional euphoria have been noted, ambulatory patients should be warned not to operate machinery, drive cars, or unnecessarily expose themselves to hazards.

Precautions: *Certain Respiratory Conditions.* Although respiratory depression has rarely been reported after oral administration of Talwin, the drug should be administered with caution to patients with respiratory depression from any cause, severe bronchial asthma and other obstructive respiratory conditions, or cyanosis.

Impaired Renal or Hepatic Function. Decreased metabolism of the drug by the liver in extensive liver disease may predispose to accentuation of side effects. Although laboratory tests have not indicated that Talwin causes or increases renal or hepatic impairment, the drug should be administered with caution to patients with such impairment.

Myocardial Infarction. As with all drugs, Talwin should be used with caution in patients with myocardial infarction who have nausea or vomiting.

Biliary Surgery. Until further experience is gained with the effects of Talwin on the sphincter of Oddi, the drug should be used with caution in patients about to undergo surgery of the biliary tract.

Patients Receiving Narcotics. Talwin is a mild narcotic antagonist. Some patients previously receiving narcotics have experienced mild withdrawal symptoms after receiving Talwin.

CNS Effect. Caution should be used when Talwin is administered to patients prone to seizures; seizures have occurred in a few such patients in association with the use of Talwin although no cause and effect relationship has been established.

Adverse Reactions: Reactions reported after oral administration of Talwin include *gastrointestinal:* nausea, vomiting; infrequently constipation; and rarely abdominal distress, anorexia, diarrhea. *CNS effects:* dizziness, lightheadedness, sedation, euphoria, headache; infrequently weakness, disturbed dreams, insomnia, syncope, visual blurring and focusing difficulty, hallucinations (see *Acute CNS Manifestations* under WARNINGS); and rarely tremor, irritability, excitement, tinnitus. *Autonomic:* sweating; infrequently flushing; and rarely chills. *Allergic:* infrequently rash; and rarely urticaria, edema of the face. *Cardiovascular:* infrequently decrease in blood pressure, tachycardia. *Other:* rarely respiratory depression, urinary retention.

Dosage and Administration: *Adults.* The usual initial adult dose is 1 tablet (50 mg.) every three or four hours. This may be increased to 2 tablets (100 mg.) when needed. Total daily dosage should not exceed 600 mg.

When antiinflammatory or antipyretic effects are desired in addition to analgesia, aspirin can be administered concomitantly with Talwin.

Children Under 12 Years of Age. Since clinical experience in children under 12 years of age is limited, administration of Talwin in this age group is not recommended.

Duration of Therapy. Patients with chronic pain who have received Talwin orally for prolonged periods have not experienced withdrawal symptoms even when administration was abruptly discontinued (see WARNINGS). No tolerance to the analgesic effect has been observed. Laboratory tests of blood and urine and of liver and kidney function have revealed no significant abnormalities after prolonged administration of Talwin.

Overdosage: *Manifestations.* Clinical experience with Talwin overdosage has been insufficient to define the signs of this condition.

Treatment. Oxygen, intravenous fluids, vasopressors, and other supportive measures should be employed as indicated. Assisted or controlled ventilation should also be considered. Although nalorphine and levallorphan are *not* effective antidotes for respiratory depression due to overdosage or unusual sensitivity to Talwin, parenteral naloxone (Narcan®, available through Endo Laboratories) is a specific and effective antagonist. If naloxone is not available, parenteral administration of the analeptic, methylphenidate (Ritalin®), may be of value if respiratory depression occurs.

Talwin is not subject to narcotic controls.

How Supplied: Tablets, peach color, scored. Each tablet contains Talwin (brand of pentazocine) as hydrochloride equivalent to 50 mg. base. Bottles of 100.

Winthrop Winthrop Laboratories, New York, N. Y. 10016 (1583)

50 mg. Tablets

Talwin®

brand of

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the long-range analgesic

1972 Annual Session Oct. 1-5 in Detroit features many innovations in program

There are a number of unique and interesting features about the 1972 MSMS Annual Session coming up Oct. 1-5 at the Sheraton-Cadillac Hotel, Detroit.

Program chairman Robert Tupper, MD, Lansing, and Richard Judge, MD, Ann Arbor, have kept the best features of the former annual sessions and added new ones in their efforts to attract physicians to the meetings.

On Tuesday, Oct. 3, a special afternoon program is scheduled for hospital personnel, including administrators, chiefs of staff, vice chiefs of staff and chiefs of clinical departments. Set for 2 to 5 p.m. in the English Room, the program will be moderated by Richard W. Pomeroy, MD, Lansing, director of medical education at Sparrow Hospital, Lansing.

It will include discussions of the functions and responsibilities of staff heads, staff responsibilities for continuing medical education, impact of new joint commissions standards on the medical staff and the essential functions of the medical staff.

Following this special session will be a grand opening of the exhibits and an Oktoberfest in the exhibition hall, which will precede a gala speaker's reception and installation dinner for new officers of MSMS.

Also on Tuesday, a special program is planned by the MSMS Committee on Medicine and Religion. Entitled "The One Who Heals," the 3 to 5 p.m. session will be moderated by Winslow G. Fox, MD, Ann Arbor, chairman of the MSMS committee.

Members of the Michigan Academy of Family Physicians will receive prescribed credit for each hour they attend the 1972 Annual Session. Attendance cards for MAFP members will be available at the registration desk.

Thoughout the five days of meetings, MSMS staff members will man the registration desk, news room, hospitality room, and communications center to aid all attending physicians.

On the final day of meetings, Thursday, Oct. 5, another special program is planned for physicians and science writers. It is entitled "The Practical Aspects of Bio-Medical Communication," and will be moderated by Alfred H. Whittaker, MD, Grosse Pointe, governor emeritus of Wayne State University and president of the Michigan chapter, American Medical Writers Association.

The medical writers' meeting will take up medical writing and the student, difficulties of simple writing, nature of scientific writing, use of audio-visual aids, sources and resources in bio-medical communication and facilities the university provides for the medical writer.

Michigan Medicine

OFFICIAL JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY • VOLUME 71, NUMBER 27 • SEPTEMBER, 1972

To
Progress

Michigan State
Medical Society
107th Annual
Scientific Session
Oct. 3-5 1972 Detroit

Doctors must pre-register for PG courses at 1972 Annual Sessions

The scientific program of the 1972 MSMS Annual Session will include three postgraduate courses on the subjects of fainting, recurrent chest pain, and surgical approaches to coronary disease.

All three are open to any interested physicians. Physicians are asked to pre-register and pay $10, but the courses are free to all interns, residents and students.

The courses on fainting and "Strategies in the diagnosis and management of patients with recurrent chest pain" will run concurrently from 2 to 5 p.m. Wednesday, Oct. 4. "Fainting" will be presented in the English Room, with moderator Irwin J. Schatz, MD, Ann Arbor, associate professor

(Continued on Page 771)

Exhibition Hall at 1972 Annual Session to feature these firms

Michigan physicians attending the 1972 MSMS Annual Session at the Sheraton-Cadillac Hotel, Detroit, will get a sneak preview of exhibitors' booths this year.

From 6 to 7 p.m. Tuesday, Oct. 3, an "Oktoberfest" cocktail reception will be hosted by MSMS President Sidney Adler in the exhibit hall for doctors and exhibitors. All exhibits will be set up and on view for that hour, preceding a dinner for the exhibitors and the inaugural banquet for physicians.

A total of 42 exhibits are scheduled to be displayed during the annual session, showcasing products and techniques ranging from encyclopedias to baby foods and including new scientific products and techniques.

The leasing of the exhibit space makes it possible for MSMS to present the two-day Annual Scientific Session free of charge to the doctor. MSMS wishes to express its gratitude to each firm who will be presenting displays.

They are as follows:

Technical exhibitors

W. B. Saunders Company
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Eli Lilly & Company
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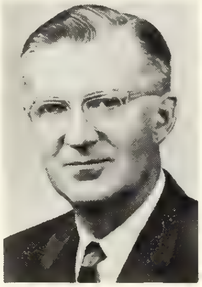
Secretary of State to keynote MDPAC Luncheon

Mr. Austin



Rep. Harvey

Michigan's Secretary of State, Richard H. Austin, will headline the annual MDPAC-sponsored Annual Luncheon at noon Monday, Oct. 2, during the 1972 MSMS Annual Session in Detroit.

Also leading the program will be Congressman James Harvey, Saginaw, a member of the U.S. House of Representatives.

Secretary Austin and Congressman Harvey will speak in the Woodward Room of the Sheraton-Cadillac Hotel, scene of the annual session meetings. All MSMS members are invited to attend the luncheon. Tickets will go on sale Sunday, Oct. 1, at the registration desk at Annual Session headquarters.

Mr. Austin was elected Secretary of State in November, 1970, and previously served as Wayne County auditor. He is a CPA and officer of several companies and institutions. He holds an honorary Doctor of Laws degree from Detroit College of Business.

Congressman Harvey is a lawyer. He is a member of the House Committee on Interstate and Foreign Commerce. He is a former Saginaw mayor and has been a member of Congress since 1960.

Drug therapy tips

By Sharad Khanderia, R.Ph., M.S.
Ann Arbor

Q. Would prochlorperazine (Compazine®) cause a false-positive pregnancy test? S.M., Ypsilanti

A. *Compazine® is a phenothiazine derivative. Phenothiazines have been reported to give false-positive pregnancy tests when Human Chorionic Gonadotropin (HCG) is used for the test procedure. Moderate breast engorgement and lactation may occur in women taking large doses of phenothiazine.*

Q. Is paraldehyde safe for use in pregnant women? Can parenteral paraldehyde be administered by mouth? How do you mask the taste? R.M., Detroit

A. *Paraldehyde readily crosses the placental barrier and appears in fetal circulation. The effect on the fetus is unknown. Parenteral paraldehyde can be administered by mouth. The taste can be masked when mixed with chilled juice.*

Mr. Khanderia is author of this month's column. He is associated with the Drug Information Center of University Hospital. Stewart B. Siskin, Pharm.D., is supervisor of the Center.

Q. What is the recommended dose of Potaba® for the treatment of scleroderma? R.B., Detroit

A. *A patient should be started with 4 Gms. per day orally in divided doses. This could be built up to 12 to 15 Gms. per day in divided doses.*

Q. Does heroin cause fragmentation of red blood cells? B.A., Detroit

A. *A case has been reported where it was believed that intravenous administration of heroin could have caused acute intravascular hemolysis.*

Q. Has clomiphene (Clomid®) been used for the treatment of male sterility? T.K., Ann Arbor

A. *Clomiphene citrate has been used for the treatment of defective spermatogensis. The dose of 50 mg./day for 60 days showed the best result. This dose showed improvement in sperm concentration and in sperm motility. The mechanism of this action of clomiphene is uncertain.*

Q. Does guanethidine (Ismelin®) decrease urinary excretion of catecholamines and interfere with the diagnosis of phenochromocytoma? R.A., Ann Arbor

A. *A small decrease in urinary norepinephrine and a slight increase in urinary epinephrine excretion have been observed in normal subjects on therapeutic doses of guanethidine for 2 to 3 weeks. However, patients with essential hypertension treated for 4 months manifested a one-third decrease in urinary norepinephrine excretion. This effect is probably large enough to interfere with the diagnosis of pheochromocytoma.*

Q. What is the dose of arginine HCl for determining growth hormone levels? J.M., Ann Arbor

A. *The dosage in several studies was about 0.5 Gram/Kg. Another dose employed was 30 Grams of a 5% solution infused over 30 minutes.*

Q. Is it possible to dilute diphenylhydantoin (Dilantin®) injection with solutions other than the diluent provided by the manufacturer? D.K., Ann Arbor

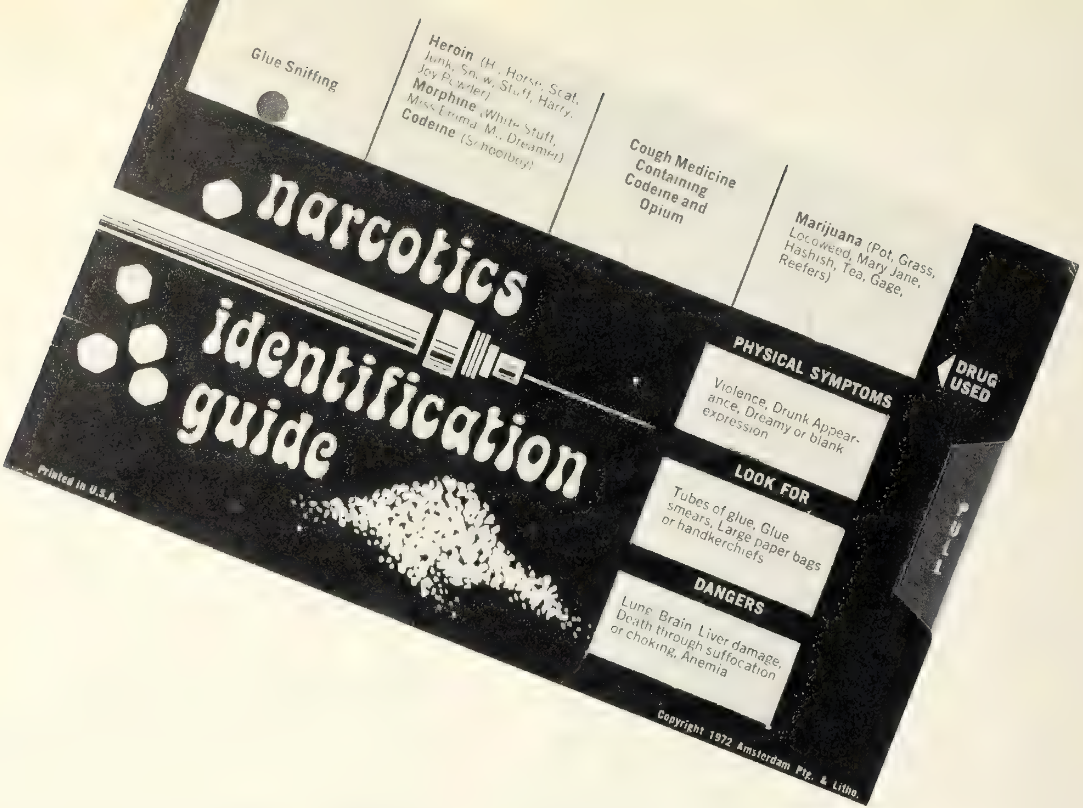
A. *No. Dilantin® should only be diluted with the diluent provided and further dilution should not be made with infusion fluids. Reconstituted Dilantin solutions have a pH of about 12.*

PG COURSES/continued

of internal medicine, Heart Station, the University of Michigan Medical Center. The course will be concerned with central nervous system causes, cardiac causes and miscellaneous causes of fainting.

The session on recurrent chest pain, scheduled in the Crystal Ballroom, will be led by moderator Daniel J. Fall, MD, Ann Arbor, clinical assistant professor of medicine at the U-M Medical Center. The course will include the history, coronary, geography and noninvasive techniques as well as radiologic aspects, esophageal causes and the musculo-skeletal causes of recurrent chest pain.

The English Room will be the site of the 2-5 p.m. Thursday course on "Surgical approaches to coronary disease," with moderator Sol D. Pickard, MD, Detroit, staff physician, Division of Cardiovascular Diseases, Henry Ford Hospital. Discussion will include selecting patients for aortocoronary bypass surgery, surgery for obstructive coronary disease, assessment of aortocoronary bypass surgery for obstructive coronary disease, assessment of aortocoronary bypass surgery in the postop patient, recognition of surgical complications of acute myocardial infarction, surgery for the patient with complications of acute myocardial infarction, and circulatory assistance for shock after myocardial infarction.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Enterprising St. Clair County Society builds good will while aiding communities

By Judith Marr
Managing Editor

The pocket-sized "slide rule" reference for drugs and their symptoms of abuse pictured on this page was the object of a highly-successful public relations project carried out recently by the St. Clair County Medical Society.

William S. Bowden, MD, Marine City, SCMS president, received a sample of the "slide rules" (pictured on this page) in the mail.

Doctor Bowden obtained funds from the St. Clair County Society to order 1,000 of the pocket references. With his society's help, the slide rules were mailed to the superintendents of all six school districts in the county. They in turn were asked to pass the reference guides to their principals, teachers and coaches.

The slide rules were imprinted with "contributed by the St. Clair County Medical Society" to show that the local doctors as a group were interested in combating the drug abuse problem.

"They were well received," reports Doctor Bowden. "Many wanted more of the guides." To those teachers requesting more, Doctor Bowden sent the name and address of the company producing the slide rules, the Amsterdam Printing Company of Amsterdam, N.Y.

"We thought if a student came into the classroom acting strangely," explains Doctor Bowden, "a teacher could at least ask the kid what he thought he had been taking and compare his symptoms with those reported on the slide rule for that drug."

He himself carries one of the slide rules in his pocket at all times, for use in the ER.

Doctor Bowden estimates that St. Clair County, adjacent to the northern edge of Macomb County, and within easy driving distance of Detroit, has a "moderately severe" drug problem.

The success of the St. Clair County project, Doctor Bowden suggests, is that "it gave people a gadget easy to carry in their pockets. The information is not on a paper that gets filed and then forgotten. It's a case of a practical approach."

Among the samples of good will generated by the SCMS's donation of the slide rules are these:

George A. Johnson, superintendent, Algonac Community Schools: "I am certain that they (the guides) will prove helpful for our teachers as they encounter the problems and questions of drug abuse. We appreciate the interest which you and other members of the St. Clair County Medical Society have shown, especially as the problems center around our youth. We in the schools, as do you, realize that for the time it is a never-ending battle and we thank you for your concern."

Robert W. Coulter, superintendent, Port Huron Area School District: "We want to thank you for the Narcotics Identification Guides provided by the St. Clair County Medical Society. We could use 300 additional guides . . . Please express our appreciation to the society for this generous and worthwhile contribution."

Advertisement

> *"The history of science, and in particular the history of medicine . . . is . . . the history of man's reactions to the truth, the history of the gradual revelation of truth, the history of the gradual liberation of our minds from darkness and prejudice."*
>
> *—George Sarton, from "The History of Medicine Versus the History of Art"*

Would it be useful in clinical practice to have government predetermine drugs of choice?

Opinion

Results of a survey of physicians:

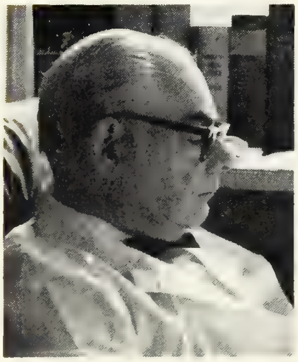
13.3%
Yes, it would be useful.

86.7%
No, it would not be useful.

Would it be useful in clinical practice to have government predetermine drugs of choice?

Doctor of Medicine

Walter Modell, M.D.,
Professor of Pharmacology,
Cornell University
Medical College,
Editor,
Clinical Pharmacology
& Therapeutics,
Drugs of Choice,
Rational Drug Therapy



The proposition that government should determine one or two "drugs of choice" within a given therapeutic class reflects the belief that a similarity in molecular structure insures a close similarity in pharmacologic effect. But this is by no means the rule. An obvious example would be in the field of diuretics, where a small change in chemical structure accounts for substantial differences in concomitant effects such as potassium excretion.

Any attempt to dictate the "drug of choice" would be complicated by the fact that some populations demonstrate a bimodal distribution in their reaction to drugs. If the data on drug response are mixed for the total population, one drug will appear to be as useful as the other. But if drug response is reported separately for different segments of the population, drug A will be found to be better for one group and drug B for the other.

It may, of course, be possible to determine drugs of choice in particular categories on a broad statistical basis. But there are always certain patients in whom a drug produces odd, unpredictable or idiosyncratic reactions. So, though a drug might statistically be the most useful one in a given situation, individual variations in response might make it the *incorrect* one.

The point I wish to make is that if two, three, four or more drugs in one class are of approximately equal merit, that in itself is justification for their availability. Exceptional cases do arise in which one drug would be useful to a certain segment of the population and another drug would be of no use at all. In the practice of medicine, the physician must be prepared to treat the routine as well as the unusual case.

Another objection to the determination of a drug of choice is that precise statements of *relative* efficacy are very difficult to make—much more difficult than statements of efficacy. For example, in testing drug efficacy, it is easy to determine the difference between a drug that is effective in treating a condition and one that is not at all effective. Thus, it is fairly easy to determine whether a drug is more effective than a placebo. But if you compare one drug that is effective with another drug that is also effective, and the relative differences between them are very slight, statements of relative efficacy may be very difficult to make with assurance.

I do not mean to imply that relative efficacy statements are not useful or can never be made. With some groups of drugs (e.g., analgesics), extensive study and precise methodology have yielded useful information on relative efficacy. But in most situations, such information can be acquired only through studies encompassing three to five years of use in many more patients than are used to compare drugs with a placebo for the introduction of a drug into commerce. It is really only after practitioners use a drug extensively that relative safety and efficacy in practice can really be determined.

The Bureau of Drugs has suggested the package insert as a possible means of communicating information on relative efficacy of drugs to the physician. I find this objectionable, since I do not believe the physician should have to rely on this source for final scientific truth. There is also a practical objection: Since few physicians actually dispense drugs, they seldom see the package insert. In any event, I would maintain that the physician should know what drug he wants and why without depending on the government or the manufacturer to tell him.

Undoubtedly, physicians are swamped by excessive numbers of drugs in some therapeutic categories. And I am well aware that many drugs within such categories could be eliminated without any loss, or perhaps even some profit, to the practice of medicine. But, in my opinion, neither the FDA nor any other single group has the expertise and the wisdom necessary to determine the one "drug of choice" in all areas of medical practice.

Maker of Medicine

nneth G. Kohlstaedt, M.D.,
Vice President,
Medical Research,
Eli Lilly and Company

In my opinion, it is not
e function of any govern-
ent or private regulatory
ency to designate a "drug
choice." This determina-
n should be made by the
ysician after he has re-
ved full information on
e properties of a drug,
d then it will be based on
s experience with this
ug and his knowledge of
e individual patient who
seeking treatment.

If an evaluation of com-
rative efficacy were to be
ade, particularly by gov-
nment, at the time a new
ug is being approved for
rketing, it would be a
eat disservice to medi-
ie and thus to the patient
he consumer. For exam-
e, when a new therapeu-
agent is introduced, on
e basis of limited knowl-
ge, it may be considered
be more potent, more
fective, or safer than
oducts already on the
arket. Conceivably, at
is time the new drug
uld be labeled "the drug
choice." But as addi-
nal clinical experience is
cumulated, new evidence
ay become available.
ter, it may be apparent that the established products should not be so easily dismissed.

Variation in patient response to drugs constitutes one of the major obstacles to the determination of "drugs of choice." We are just beginning to open the door on pharmacogenetics, but it is evident that genetic differences cause wide variations in the way drugs are absorbed, metabolized, etc. This fact alone is sufficient to make unrealistic the idea that there is one drug in each class to be used for every human being.

The problem of determining relative drug efficacy is an extremely complicated one. Comparison with other drugs of the same class should not be a prerequisite for marketing a new substance. In some therapeutic areas, it may be difficult to make accurate comparisons. For example, in the treatment of infections it is not possible to conduct crossover studies. Recovery may be influenced by factors which cannot be controlled or measured, i.e., natural host resistance and virulence of infective agents. A drug's acceptability must often be judged on the basis of its own performance, and this may be limited to experience in a relatively small patient population. If the introduction of a new drug must await the adequate establishment of relative efficacy, the duration of clinical trial and extent of studies would be greatly prolonged, particularly for rare or unusual conditions. The availability of a new drug would be delayed. Many patients might suffer needlessly and lives might be lost.

Relative efficacy can best be established by experience in a general patient population through regular channels of clinical practice. The physician considers the patient as a whole, which means the patient often has multiple problems and drugs must be selected with this in mind. Hence, a "drug of choice" in an uncomplicated case may not be the best drug for a patient with associated problems. Publication of well-controlled studies in medical journals may provide comparative evidence; discussions at medical meetings, presentations at postgraduate courses, and the new audio-visual technology may bring evidence to physicians on comparative therapy. In a free medical marketplace, a drug that does not measure up will fall into disuse. For example, broad clinical experience has established vitamin B_{12} as the "drug of choice" for the treatment of primary pernicious anemia. No amount of advertising or promotional effort by the manufacturer could increase the use of liver extract for this anemia. However, a physician may wish to employ parenteral liver preparations for a special purpose.

In the field of surgery, peer review in the hospital has brought significant improvement in the use of new techniques and procedures. Something of this nature would be useful in the area of drug therapy. However, it should be developed by the medical profession itself and would necessitate, for its proper function, an improvement in the dissemination of reliable data on clinical pharmacology of drugs under consideration.

Ideally, information on the relative efficacy of drugs should be gathered and assessed by the physicians who actually administer the specific agents to a specific patient population. To do this, they will need even more information on the drugs they use – information that the pharmaceutical manufacturers must begin to provide if government regulation of *"drugs of choice"* is to be avoided.

Opinion & Dialogue

What is your opinion, doctor?
Send us your comments on the above issue.

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Scientific papers

Prostaglandins in human reproduction

By Vinod Vakhariya, MD
Alfred I. Sherman, MD
Detroit

It has been more than 40 years since the observation of Kurzrok and Lieb that human myometrium reacted to the instillation of fresh human semen in vitro and, though now known to be a misnomer, the name Prostaglandins, which Von Euler in 1935 coined for this active substance in seminal fluid, persists. It was not until 1957 that the two crystalline compounds now called PGE_1 and $PGF_1\alpha$ were isolated from vesicular glands of sheep by Bergstrom. We are greatly indebted to the Swedish scientists for their initial work and continued interest in Prostaglandins. For a review of the preliminary data with historical information and the possible physiological roles of Prostaglandins, we suggest two review articles, one by Bergstrom, et al.[1] and the other by Horton.[2] The purpose of this paper is to review the current clinical applications of Prostaglandins and to discuss their possible future applications in human reproduction.

Occurrence and structure

Prostaglandins are 20-carbon fatty acids containing a cyclopentane ring based on a Prostanoic acid skeleton. In nature they are produced from the corresponding polyunsaturated fatty acids. So far four series of natural Prostaglandins have been described and are designated by the letters E, F, A and B, based on differences in the ring (**Fig. 1**). The degree of unsaturation of the side chains is indicated by the subscript numeral after the letter. There are six primary Prostaglandins in the E and F series. Further discussion on structure and nomenclature is contained in a paper by Anderson.[3]

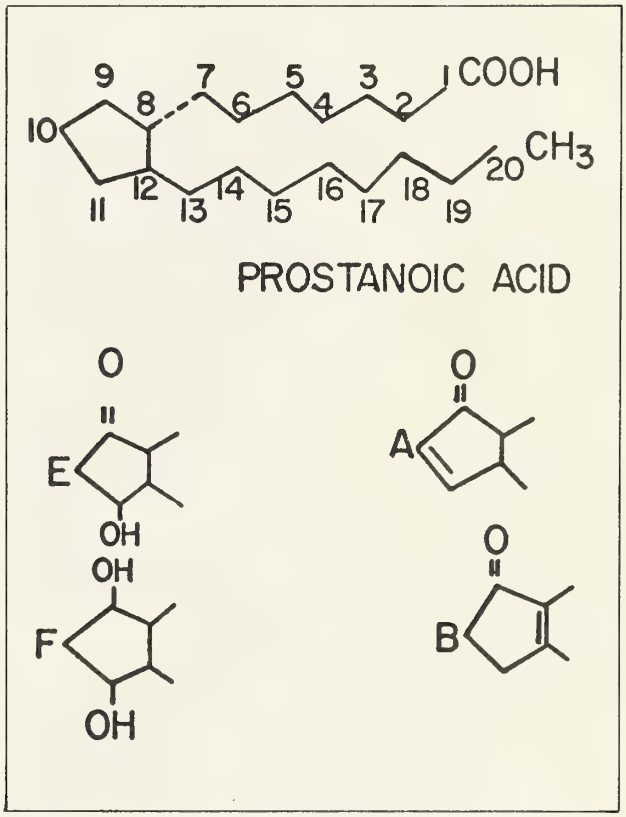

Figure 1. Prostanoic acid and structural differences between Prostaglandins E, F, A and B series.

These interesting compounds have been found in many organs and in different species. The fact that their actions are different in vivo and in vitro and are sometimes species specific, is what makes these compounds more interesting. The various types of Prostaglandins present in the human tissues and fluids involved in reproduction are shown in **Table I.**

Prostaglandins in labor

Induction of labor

Karim and Devlin in 1967 reported the presence of Prostaglindins E_1, E_2, $F_1\alpha$ and $F_2\alpha$ in amniotic fluid of patients in labor at term, with $F_2\alpha$ having the greatest concentration. They also noted that

---

Doctor Vakhariya is assistant chairman, and Doctor Sherman is chairman, Department of Obstetrics and Gynecology, Sinai Hospital of Detroit and Wayne State University School of Medicine.

Table 1

Distribution of Primary Prostaglandins in Human Tissues and Fluids in Reproduction*

Source	**E_1**	**E_2**	**E_3**	**$F_{1\alpha}$**	**$F_{2\alpha}$**
Seminal Plasma	+	+	+	+	+
Menstrual Fluid		+			+
Endometrium		+			+
Amniotic Fluid	+	+		+	+
Decidua	+	+		+	+
Placental Vessels	+	+		+	+
Umbilical Cord Vessels	+	+		+	+
Blood in Labour†					+

*Speroff L. and Ramwell P.W.[58]
†Karim S.M.M.[5]

these Prostaglandins were present in the decidua of term patients in labor in higher concentrations than in the amniotic fluid and, therefore, suggested that the decidua was the main source.[4] Of further interest is the fact that though absent in blood prior to labor, $PGF_{2}\alpha$ is present in human blood during labor.[5] Karim's, et al.,[6] report of the first 10 successful inductions of labor with $PGF_{2}\alpha$ in patients at or near term stimulated great interest and since then many successful inductions of labor with Prostaglandin $F_{2}\alpha$, E_2 and E_1 have been reported.[7-10]

In all the earlier studies no objective evaluation was made between Prostaglandins and the available Oxytocic agents, particularly in regard to its ability to induce labor in the more unfavorable group of patients. Studies reported recently from this country by Anderson, et al.[11] and Vakhariya and Sherman,[12] comparing $PGF_{2}\alpha$ and Pitocin in a double blind fashion, are probably more objective for comparing success. In these studies the patients to be induced were divided into "easy" and "difficult" groups according to Bishop's[13] inducibility scoring system, allowing a more reliable comparison.

Success rate and induction delivery time

At the Conference on "Prostaglandins" held by The New York Academy of Sciences in September 1970, Karim presented the results of a double blind study of 300 inductions with a success rate of 96%, 67% and 56% for PGE_2, $PGF_{2}\alpha$ and Oxytocin respectively.[14] However, Beazley and Gillespie obtained only 73% success with PGE_2 as well as with Oxytocin in a double blind study of 300 patients.[15] In neither of these studies were inducibility scores utilized. Anderson, et al.[11] reported a success rate of 85.19% and 79.6% with synthetic Oxytocin and $PGF_{2}\alpha$ respectively in a total number of 73 inductions. Vakhariya and Sherman have reported an overall success rate of 95%. In their study Pitocin yielded a 92% success rate as compared to 88% for $PGF_{2}\alpha$ in the "difficult" group and 100% for each drug in the "easy" group. The overall combined success rate was 96% for Pitocin and 94% for $PGF_{2}\alpha$. All the inductions in the "easy" category were successful with either drug. This suggests how erroneous conclusions can be drawn by success rates alone if one does not utilize some kind of objective inducibility score for evaluation. It should also be mentioned that both these latter studies included only multiparas—gravida 2 through 5.

Table 2

Induction Delivery Time "Difficult" Inductions

Induction Del. Time—Hrs.	**Pitocin**	**$PGF_{2}\alpha$**
5 or less	6	4
5½ - 8	8	15
8½ - 10½	8	2
C-Section	1	1
Failures	2	3
Total	25	25

In the study by Anderson, et al.,[11] the mean duration of labor was shorter with $PGF_{2}\alpha$ by 1.8 hours in the "difficult" group and 1.25 hours in the "easy" group. In the authors' study the "induction-delivery time" was divided into three groups: 5 hours or less, 5½-8 hours and 8½-10½ hours. Most of the patients in the "easy" group delivered within five hours or less with each drug. However, in the "difficult" category, only 14 of 22 patients (63%) delivered in eight hours or less with Pitocin, while 19 of 21 (90%) delivered in this time with $PGF_{2}\alpha$ (**Table II**). Therefore, though not valid because of the small number of patients, there is some suggestion for an advantage of $PGF_{2}\alpha$ over Pitocin in terms of yielding shorter induction/delivery times for difficult inductions in both these studies.

Furthermore, to compare more effectively the two drugs the inducibility scores were divided into three groups: 1) those with scores of 1 and 2, 2) 3 and 4, and 3) 5. The number of patients in each group was almost equal, including one successful induction with each drug in group 1.[12]

The evaluation of the comparative effectiveness of both drugs in this group of patients, namely those with low inducibility scores, needs further study.

Side effects

In the evaluation of a new drug, one is obligated to consider its side effects. Uterine hypertonus with Prostaglandin inductions has been reported by some investigators.[11,16,17] Excluding two cases in which the cause was considered iatrogenic, we observed hypertonus in the form of prolonged contraction or an increased resting tone in seven patients, with $PGF_{2}\alpha$, which did seem to be dose related because all responded rapidly to a reduction in dose. In all these instances the newborns had good Apgar scores at birth.[12] In our opinion, for all inductions of labor the careful observation of the patient with electronic fetal monitoring, when available, is mandatory.

None of the studies have reported any appreciable difference in maternal vital signs, blood chemistries, gastrointestinal symptoms, blood loss at delivery, or immediate neonatal condition of the newborns.

Dosage

The protocol used in this country calls for an observation period of one hour after which the solutions are infused with a Harvard Pump (The dosage schedule is shown in **Table III**). The infusion rate is increased in a stepwise fashion until adequate uterine contractions with satisfactory frequency are obtained. Karim,[14] in Uganda, uses lower doses, e.g. $PGF_2\alpha$ 2.5-10 μg/min., PGE_2 0.3-1.2 μg/min. and Oxytocin 2-8 MU/min. Anderson's, et al.[22] discussion suggests that the disparity between dosage and success might be due to genetic differences or difference in weight of these two groups of patients.

Prostaglandin and spontaneous labor

Karim[5] collected blood samples from 10 women in established labor at different phases of uterine contraction. He observed the highest concentration of $PGF_2\alpha$ in samples taken during contractions and at one minute prior to the onset of contractions, while during the resting period (two minutes after contraction) there was no detectable amount of $PGF_2\alpha$. He concludes, therefore, that $PGF_2\alpha$ is not released as a result of contractions. In five patients in established labor from whom we collected blood samples in a more or less similar manner to Karim, measurement of $PGF_2\alpha$ by radioimmune assay did not reveal any positive correlation with uterine contractions. Detectable amounts were present during the uterine relaxation period (unpublished data). From our gross data, at this stage, all we can say is that detectable levels of $PGF_2\alpha$ are present in the peripheral venous blood of patients in labor at term.

During in vitro experiments on midtrimester and term myometrial strips, Brummer observed an increase in activity either in the form of increase in amplitude or an increased duration of syntocinon response or a combination of these, when syntocinon was used following a dose of Prostaglandin E. He suggested the hypothesis that during parturition endogenous Prostaglandins, rather than having a direct action on the myometrium, act as mediators which sensitize the uterine muscle to circulating Oxytocin.[18] Though this hypothesis remains far from established, his suggestion of using a short infusion of a low dose of PGE to prime the uterus followed by Oxytocin infusion to promote midtrimester abortion, is worth exploring.

Table 3

Drug Infusion Dosage

CC/Min.	Pitocin M.U./Min.	$PGF_2\alpha$ μg/Min.	PGE_2 μg/Min.
0.0382	0.764	1.91	0.19
0.0764	1.52	3.82	0.38
0.191	3.82	9.55	0.95
0.382	7.64	19.1	1.91
0.764	15.28	38.2	3.82

Though high concentrations of $PGF_2\alpha$ have been discovered in the amniotic fluid and decidua of term patients in labor with highest concentrations in the latter and detectable amounts in peripheral venous blood, the role of Prostaglandin $F_2\alpha$ in spontaneous onset of labor is still an unsolved puzzle.

Other routes of prostaglandin administration for induction of labor

Karim reports successful inductions at or near term with repeated oral or vaginal administration of PGE_2 and $PGF_2\alpha$.[19] He observed no side effects on the gastrointestinal tract or the cardiovascular system with oral[20] doses of 0.5-1 mg. of PGE_2 and 5-10 mg. of $PGF_2\alpha$. Because of the concern for uterine hypertonus and fetal safety, in our opinion there is no better route than the controlled intravenous administration of an agent for induction of labor.

Premature labor

Polyphloretin phosphate is found to selectively antagonize the smooth muscle stimulating actions of PGE and PGF compounds on isolated preparations of gut and uterus from many species. However, it did not antagonize the actions on human umbilical cord.[21] What effective role Polyphloretin phosphate and related compounds will play in prevention of "Premature Labor" remains to be seen.

Conclusion

Though PGE_2 and $PGF_2\alpha$ seem to be effective in inducing labor at term, they will not replace synthetic Oxytocin unless they are found to be more effective in difficult inductions or in indicated inductions prior to 36 weeks.

Prostaglandins and abortion

Because of the changing abortion laws in this country, newer, better, more effective and safer methods of abortion are being sought. The need is most urgent at this time. Myometrium is refractory to synthetic Oxytocin in the early period of gestation. Intra-amniotic injection of hypertonic saline has its own disadvantages. Prostaglandins, naturally, receive increased attention. Most of the reports of their use for abortion are since 1969.

Induction of abortion with intravenous infusion of prostaglandins

The reports of successful abortions with intravenous administration of Prostaglandins by Roth-Brandel, et al.[23] and Karim and Filshie[24] appeared in the same issue of *Lancet* in January 1970. Further reports of success with PGE_2 and $PGF_2\alpha$ from these groups appeared in the literature in the same year.[25-27] Hendricks, et al. collected data on abortions with PGE_2 and $PGF_2\alpha$ from various centers, including their 10 cases.[28] Included in their report were results with different dosages and routes of administration, as well as the percentage of success, mean time involved and the complications. To compare the results is a difficult, perhaps impossible task because some of the studies will not include all the information for evaluation. Studies which use a similar protocol are ideal for evaluation. Perhaps the forthcoming studies will be more critical and complete.

Of the larger series reported, Karim[14] had a success rate of 97% in 150 cases with PGE_2 and 88% in 50 cases with $PGF_2\alpha$ with an average induction-abortion time of 14.5 hours and 19 hours respectively. Filshie[29] reported a success rate of 93.5% with PGE_2 in 139 patients, mainly in the second trimester; however, if the 25 cases of incomplete abortions are excluded, the success rate drops to 75.5%. Whether to accept an incomplete abortion as a successful one is under discussion. We feel, as do many others, that an incomplete abortion should not be considered a successful abortion, though partial expulsion of the products of conception makes evacuation of the uterus easier and safer. Excluding the five cases who needed evacuation, Embrey[30] had 23 successful abortions in 30 cases (76%) with PGE_1 and PGE_2. Bygdeman and Wiquist[31] had a success rate of 77% (excluding three incomplete cases) in 22 patients of eight weeks or less gestation. However, in later stages of gestation it was not that promising. In some of the recent reports[28,32,33] from this country and Canada the results vary from 30% to 90%. However, the number of cases studied by individual groups is very small.

Side effects

Nausea and vomiting are being observed to various degrees by practically every investigator. Though a minor side effect, it sometimes can be very annoying to a patient. Vomiting is thought by some investigators to be due to a local effect on the intestine. Gastrointestinal symptoms seem to be associated more with $PGF_2\alpha$ than with PGE_2.

Unexplained elevations of temperature,[28,33] above 99-100°F., not reported in earlier studies, is observed with the administration of $PGF_2\alpha$ specifically when the dose is above 100 μg/min. Though the fever subsides without any treatment after discontinuation of the drug, it is still a nightmare for the obstetrician. The cause of this fever is unknown.

Superficial erythema and pain along the vein proximal to the infusion site is more commonly observed with PGE_2. This appears to be a transient phlebitis.

Two instances of asthmatic attacks have been reported recently[34] in patients receiving 200 μg/min. of $PGF_2\alpha$ for therapeutic abortion.

Some of the side effects are dose related, but high dosages are required to obtain effective end results.

Other routes of administration

After noting the side effects with intravenous administration of Prostaglandins for therapeutic abortion, investigators are looking for a better route of administration with fewer undesirable effects. Intra-amniotic administration seems promising. Success rates of 70-80% complete abortions are reported[35-37] with one or repeated intra-amniotic injections of $PGF_2\alpha$ and PGE_2. Apparently there is a slow release of Prostaglandins from amniotic fluid without a significant rise in blood levels, thereby avoiding the undesirable side effects.

Success has also been reported with repeated intrauterine instillation through an extraovularly placed catheter as well as by vaginal instillation of Prostaglandins in tablet form.[19,27,36,38] The latter route would be an easy and convenient one; but, its efficacy for routine use has yet to be proven.

Dosages

The dosages have not been standardized; however, the following dosage schemes have been used by various investigators:

Intravenous—
  $PGF_2\alpha$ 25 —200 μg/min.
  PGE_2 2.5 —20 μg/min.
    in an increasing stepwise fashion
Intra-amniotic—
  $PGF_2\alpha$ 10-25 mg.—
    single or repeated injection
  PGE_2 2.5-5 mg.—
    single or repeated injection
Intrauterine Instillation—
  $PGF_2\alpha$ 200-1000 μg
  PGE_2 25-200 μg
    repeated instillation depending on response
Vaginal—
  $PGF_2\alpha$ 50 mg.
  PGE_2 20 mg.
    repeated every 2½ hours

Possible mode of action

Though luteolytic action of Prostaglandins has been documented in animals, it has not been established for humans. Csapo[32] observed a statistically significant drop in plasma progesterone from preinfusion level of 38.4±4.4 ng. to 11.8±1.3 ng. per milileter in six successful inductions with $PGF_2\alpha$; and, there was no significant change from the preinfusion levels in four failures. He suggests that initial sustained uterine contractions result in suppression of placental endocrine function and a gradual increase in uterine wall tension and intrauterine pressure, leading to abortion. He believes that in addition to the reduction in placental progesterone production, luteal progesterone production may also be decreased secondarily. However, observations of the Swedish investigators indicate that the fall in plasma progesterone levels occurs after expulsion of the conceptus.[31]

Mechanism of action remains unresolved.

Conclusions

Prostaglandins E_2 and $F_2\alpha$ are abortifacients. The initial enthusiasm for the intravenous administration of these agents is fading out because of the side effects. Intra-amniotic administration looks promising. Efficacy of vaginal route has not been proven yet. The mechanism of action remains to be resolved.

Prostaglandins and ovary

There has been enough experimental evidence to suggest that $PGF_2\alpha$ is luteolytic in animals. Pharriss[39] was the first one to propose that $PGF_2\alpha$ from the secretory endometrium may be the regulating factor in ovarian blood flow and corpus luteum survival when uterine cornu and ipsilateral ovary share a common venous pathway. McCracken[40] reported a fall in progesterone secretion rate with a concomitant drop in ovarian blood flow in autotransplanted sheep ovary with infusion of $PGF_2\alpha$. He also introduced a new concept of "counter current mechanism" between utero-ovarian vein and ovarian artery, and the possibility of transport of luteolytic factor from the uterus to the ovary in sheep. Behrman, et al.[41] observed a decrease in progesterone secretion without any detectable changes in ovarian blood flow in pseudopregnant rats treated with $PGF_2\alpha$. This decrease in progesterone secretion was preventable by simultaneous administration of LH. He suggested the antagonistic action of $PGF_2\alpha$ and LH as a possible mechanism of luteolysis. Mechanism of luteolytic action of Prostaglandin $F_2\alpha$ in animals remains controversial. Recent work suggests that $PGF_2\alpha$ is probably not luteolytic in humans.[42]

These interesting compounds behave differently in vitro. The steroidogenic effects of Prostagladins in vitro on corpora lutea of different species have been reported before, and this fact has been confirmed recently.[43] Marsh[44] has shown increased adenyl cyclase activity and progesterone synthesis in slices of bovine corpora lutea treated in vitro with PGE_2. He also observed that the stimulatory effect of LH was additive to that of PGE_2, indicating that Prostaglandins may not be the mediators of LH activity. The physiological significance of this effect on the ovary remains unanswered.

Prostaglandins and "induction of menses"

Prostaglandin E_2 and $F_2\alpha$ was administered vaginally by Karim,[45] in 12 fertile women with regular menstrual cycles. When given within two to seven days after the expected menstrual day, all of them had menstrual bleeding except one. Eight of these women had a positive pregnancy test before treatment and became negative one week later. Out of the remaining four, three had negative pregnancy tests before and after treatment. One who did not bleed after treatment turned out to be pregnant, and pregnancy was terminated at 10 weeks.

Recently Jewelewicz, et al.[42] infused $PGF_2\alpha$ in three normal women on day 8 (2 subjects) and day 6 (one subject) following the ovulatory LH surge. There was no significant difference in steroid levels (LH, FSH, plasma estrogens and progesterone) of the control and treated cycles and luteal phases were identical. However, all three women had vaginal staining or bleeding during the infusion. Jewelewicz's observations suggest that $PGF_2\alpha$ is not luteolytic in humans. Induction of menses, in Karim's study, was probably due to the abortifacient action of Prostaglandins which is effective in early gestation. This assumption could have been proven had these patients been curetted and the tissue examined histopathologically.

In Sweden, a study of "induction of menses" with Prostaglandins in a group of women using no other contraceptive methods has been going on for several months. The results are awaited.

These is some suggestion that Prostaglandins have an inhibitory effect on implantation and/or delay in transport of the fertilized ova in rats. But, the dosages used were high enough to develop toxic symptoms.[46] The possible application of this in the human would be highly speculative at this stage.

Prostaglandins and Oviduct

Sandberg, et al.[47] collected human oviducts during various surgical procedures, divided them into four equal segments and studied the in vitro effects of Prostaglandins extracted from human seminal fluid. Increased tonus and amplitude of contraction in the proximal segment (near uterine

Table 4

Concentrations ($\mu g/ml$) of Prostaglandins in Human Seminal Plasma*

E_1	25	$F_{1}\alpha$	3.6
E_2	23	$F_{2}\alpha$	4.4
E_3	55	19-OHA$_1$	200
A_1	50	19-OHA$_2$	
A_2		19-OHB$_1$	
B_1		19-OHB$_2$	
B_2			

*Horton E.W.[2]

cornu) and a reverse effect on the rest of the tube was observed, irrespective of which phase of the menstrual cycle the tube was collected. They concluded that probably seminal Prostaglandins absorbed from the vagina play a role in fertilization by retaining the ovum in the middle part of the tube. Coutinho and Maia[48] recorded pressures in vivo by leaving a catheter in the tubal lumen. $PGF_{2}\alpha$ by intravenous administration and also by local instillation had a stimulatory effect on tubal motility, while PGE_2 had an opposite effect. By simultaneous uterine contractions and tubal relaxation except for the proximal segment, Prostaglandins may prove to have a physiological role in facilitation of sperm migration and fertilization.

Prostaglandins and human endometrium

"Menstrual stimulant" was the name given by Pickles[49] to the extracts of human menstrual fluid having spasmogenic activity. The principal memstrual stimulant component A was discovered to be a mixture of $PGF_{2}\alpha$ and PGE_2.[50] Measurement of Prostaglandin loss during menstrual bleeding in a teenager revealed to be five times higher in ovulatory than in anovulatory cycles.[51]. It was further observed that the total recovery of Prostaglandins from curetted endometrium was higher during the secretory phase than the proliferative phase with a higher ratio of PGF/PGE in the secretory phase. In a small number of dysmenorrheic patients PGF/PGE ratio was higher than in normal subjects, suggesting an etiological role for Prostaglandins in patients with dysmenorrhea. The pros and cons of dysmenorrhea and Prostaglandins is discussed by Pickles, et al.[52] What role Prostaglandin antagonists will play in the treatment of primary dysmenorrhea remains to be seen.

Prostaglandins and infertility in the Male

Human seminal plasma is one of the richest sources of Prostaglandins. The concentration[2] of various types of Prostaglandins is shown in **Table IV**. Various investigators have tried to establish the physiological role of these compounds in seminal fluid and to correlate their concentration with male infertility. Hawkins[53] repeated the earlier work of Asplund in 50 subfertile patients. There was no correlation between Prostaglandin concentration and conception rate in men with normal sperm counts. However, in five oligospermic individuals with normal wives, he found reduction in levels of Prostaglandins E_1, E_2, E_3, $F_{1}\alpha$, $F_{2}\alpha$. Bygdeman and Samuelsson[54] could not find any correlation between Prostaglandin content and sperm count, motility and percentage of abnormal forms in the semen samples of ten men with suspected infertility. They also analyzed semen samples from 150 men and divided them into three groups.[55] Group A, 29 fertile men with recently documented fertility; Group B, 100 men in non-investigated infertile marriages; and, Group C, 21 men in unexplained infertile marriages with no abnormal clinical or laboratory findings. The mean concentration of Prostaglandin E compounds in Groups A, B and C was 54.4, 36.4 and 18.1 $\mu g/ml$. respectively. Statistically the difference between Groups A and B is significant, and between Groups A and C is highly significant. In Group C, 41% of semen samples contained PGE compounds below 11 $\mu g/ml$. The concentration of 19-hydroxy and dehydrated (PGA and PGB) Prostaglandins was constant in three groups. The routine estimation of PGE in infertile couples seems to be in sight.

Prostaglandins and Umbilical Cord

The mechanism for constriction of the umbilical vessels at birth has always been controversial. Karim reports the presence of Prostaglandins E_1, E_2, $F_{1}\alpha$ and $F_{2}\alpha$ in extracts of fresh human umbilical arteries and veins. Except Prostaglandin E_1, all others cause contraction of the isolated umbilical artery preparation; and, a mixture of these four Prostaglandins in the same proportion as is present in umbilical vessels, always produced contractions. He suggested the possibility of Prostaglandins from amniotic fluid being transferred across the cord into the vessels.[56] Placental vessels contain the same Prostaglandins as in umbilical vessels. However, no detectable amount is noted in placental tissue.[56] Hillier and Karim discuss the subject of spontaneous constriction of umbilical vessels at birth. Some of the possible mechanisms proposed by various investigators are: chemical induction by 5-hydroxytryptamine, adrenaline, histamine, bradykinin and Prostaglandins; neurogenic mechanism; change in oxygen tension in umbilical vessels; fall in temperature.[57] It is quite possible that more than one mechanism might be involved.

References

1. Bergstrom, S., Carlson, L.A., and Weeks, J.R., "The Prostaglandins: A Family of Biologically Active Lipids," *Pharmac. Rev.* 20:1, copyright by the Williams & Wilkins Co., 1968.
2. Horton, E.W., "Hypotheses on Physiological Roles

of Prostaglandins," *Physio. Rev.* 49:1, January, 1969.

3. Anderson, N., "Program Notes on Structures and Nomenclature," *Ann. NY Acad. Sci.* 180:14, edited by Peter Ramwell & Jane E. Shaw, April, 1971.
4. Karim, S.M.M. and Devlin, J., "Prostaglandin Content of Amniotic Fluid During Pregnancy and Labour," *J. Obstet. & Gynaec. Br. Comm.* 74:230-34, April, 1967.
5. Karim, S.M.M., "Appearance of Prostaglandin $F_{2\alpha}$ in Human During Labour," *Br. Med. J.* 4:618-21, 1968.
6. Karim, S.M.M., Trussell, R.R., Patel, R.C., Hillier, K., "Response of Pregnant Human Uterus to Prostoglandin $F_{2\alpha}$—Induction of Labour," *Br. Med. J.* 4:621-23, 1968.
7. Karim, S.M.M., Trussell, R.R., Hillier, K., Patel, R.C., "Induction of Labour with Prostaglandin $F_{2\alpha}$," *J. Obstet. & Gynaec. Br. Comm.* 76:9, P. 769-82, September, 1969.
8. Karim, S.M.M., Hillier, K., Trussell, R.R., Patel, R.C., Tamusange, S., "Induction of Labour with Prostaglandin E_2," *J. Obstet. & Gynaec. Br. Comm.* 77:200-10, March, 1970.
9. Beazley, J.M., Dewhurst, C.J., Gillespie, A., "The Induction of Labour with Prostaglandin E_2," *J. Obstet. & Gynaec. Br. Comm.* 77:3, P. 193, March, 1970.
10. Embrey, M.P., "Induction of Labour with Prostaglandin E_1 and E_2," *Br. Med. J.* 2:256, May, 1970.
11. Anderson, G.G., Hobbins, J.C., Speroff, L., "Intravenous Prostaglandins E_2 and $F_{2\alpha}$ for the Induction of Term Labour," *Amer. J. Obstet. & Gynec.* 112:3, P. 382, February, 1972.
12. Vakhariya, V.R. & Sherman, A.I., "Prostaglandin $F_{2\alpha}$ for Induction of Labor," presented at the 39th Annual Meeting of the Central Association of Obstetricians & Gynecologists, September, 1971. *Amer. J. Obstet.* & *Gynec.* 113:2 P. 212, May, 1972.
13. Bishop, E.H., "Pelvic Scoring for Elective Induction," *Obstet. & Gynec.* 24:2, P. 266, August, 1964.
14. Karim, S.M.M., "Action of Prostaglandin in the Pregnant Woman," *Ann. NY Acad. Sci.* 180:483, edited by Peter Ramwell & Jane E. Shaw, April, 1971.
15. Beazley, J.M. & Gillespie, A., "Double-blind Trial of Prostaglandin E_2 and Oxytocin in Induction of Labour," *Lancet,* January 23, 1971.
16. Roberts, G. & Turnbull, A.C., "Uterine Hypertonus During Labour Induced by Prostaglandins," *Brit. Med. J.* 1:702, March, 1971.
17. Rangrajan, N.S., LaCroix, G.E., Moghissi, K., "Induction of Labor with Prostaglandin," *Obstet. & Gynec.* 38:4, P. 546, October, 1971.
18. Brummer, H.C., "Interaction of E Prostaglandins and Syntocinon on the Pregnant Human Myometrium," *J. Obstet. & Gynaec. Brit. Comm.* 78:305, April, 1971.
19. Karim, S.M.M. & Sharma, S.D., "Therapeutic Abortion and Induction of Labour by the Intravaginal Administration of Prostaglandins E_2 and $F_{2\alpha}$," *J. Obstet. & Gynaec. Brit. Comm.* 78:294, April, 1971.
20. Karim, S.M.M., "Effects of Oral Administration of Prostaglanlins E_2 and $F_{2\alpha}$ on the Human Uterus," *J. Obstet. & Gynaec. Brit. Comm.* 78:4, P. 289, April, 1971.
21. Eakins, "Prostaglandin Antagonism by Polymeric Phosphates of Phloretin and Related Compounds," *Ann. NY Acad. Sci.* 180:386, April, 1971.
22. Anderson, G., Hobbins, J., Cordero, L., Speroff, L., "Clinical Use of Prostaglandins as Oxytocin Substances," *Ann. NY Acad. Sci.* 180:499, April, 1971.
23. Roth-Brandel, U., Bygdeman, M., Wiquist, Bergstrom, S., "Prostaglandins for Induction of Therapeutic Abortion," *Lancet,* P. 190, January 24, 1970.
24. Karim, S.M.M. & Filshie, G.M., "Therapeutic Abortion using Prostaglandin $F_{2\alpha}$," *Lancet,* P. 157, January 24, 1970.
25. Wiquist, N. & Bygdeman, M., "Induction of Therapeutic Abortion with Intravenous Prostaglandin $F_{2\alpha}$," *Lancet,* P. 889, April 25, 1970.
26. Karim, S.M.M. & Filshie, G.M., "Use of Prostaglandin E_2 for Therapeutic Abortion," *Brit. Med. J.* 3:198, July, 1970.
27. Wiquist, N. & Bygdeman, M., "Therapeutic Abortion by Local Administration of Prostaglandin," *Lancet,* P. 716, October 3, 1970.
28. Hendricks, C.H., Brenner, W.E., Ekbladh, L., Brotanek, V., Fishburne, J.I., "Efficacy and Tolerance of Intravenous Prostaglandin $F_{2\alpha}$ and E_2," *Amer. J. Obstet. & Gynec.* 111:4, P. 564, October, 1971.
29. Filshie, G., "Further Clinical Studies with Prostaglandins in Reproductive Physiology (General Discussion)," *Ann. NY Acad. Sci.* 180:553, April, 1971.
30. Embrey, M.P., "Induction of Abortion by Prostaglandins E (PGE_1 and PGE_2)" *J. Reprod. Med.* 6:6, P. 256, June, 1971.
31. Bygdeman, M. & Wiquist, N., "Early Abortion in the Human," *Ann. NY Acad. Sci.* 180:473, April, 1971.
32. Csapo, A.I., Sauvage, J.S., Wiest, W.G., "The Efficacy and Acceptability of Intravenously Administered Prostaglandin $F_{2\alpha}$ as an Abortifacient," *Amer. J. Obstet. & Gynec.* 111:8, P. 1059, December, 1971.
33. Gillett, P.G., Kinch, R.A.H., Wolfe, L.S., Pace-Asciak, C., "Therapeutic Abortion with the Use of Prostaglandin $F_{2\alpha}$," *Amer. J. Obstet. & Gynec.* 112:3, P. 330, February, 1972.
34. Fishburne, J.I., Brenner, W.E., Braaksma, J.T., Staurovsky, L.C., Mueller, R.A. & Hendricks, C.H., 19th Annual Meeting Society for Gynecologic Investigation, San Francisco, 1972 (Abstract).
35. Karim, S.M.M. & Sharma, S.D., "Second Trimester Abortion with Single Intra-amniotic Injection of Prostaglandins E_2 or $F_{2\alpha}$," *Lancet,* P. 47, July 3, 1971.
36. Anderson, G., Hobbins, J.C., Caldwell, B., Speroff, L., 19th Annual Meeting Society for Gynecologic Investigation, San Francisco, 1972 (Abstract).
37. Csapo, A.I. (Personal Communications).
38. Embrey, M.P. & Hillier, K., "Therapeutic Abortion by Intrauterine Instillation of Prostaglandins," *Br. Med. J.* 1:588, March, 1971.
39. Pharriss, B., "The Possible Vascular Regulation of Luteal Function," *Perspectives in Biol. & Med.,* Spring, 1970.

40. McCracken, J., "Prostaglandin $F_2\alpha$ and Corpus Luteum Regression," *Ann. NY Acad. Sci.* 180:456, April, 1971.

41. Behrman, H., Yoshinaga, K. & Greep, R., "Extraluteal Effects of Prostaglandins," *Ann. NY Acad. Sci.* 180:426, April, 1971.

42. Jewelewicz, R., Dyrenfurth, I., Warren, M., Cantor, B., Vandewile, R., 19th Annual Meeting Society for Gynecologic Investigation, San Francisco, 1972 (Abstract).

43. Speroff, L. & Ramwell, P., "Prostaglandin Stimulation of in vitro Progesterone Synthesis," *J. Clin. Endocrinol. & Metab.* 24:606.

44. Marsh, J., "The Effects of Prostaglandins on the Adenyl Cyclase of the Bovine Corpus Luteum," *Ann. NY Acad. Sci.* 180:416, April, 1971.

45. Karim, S.M.M., "Once-A-Month Vaginal Administration of Prostaglandins E_2 and $F_2\alpha$ for Fertility Control," *Contraception* 3:3, P. 173, March, 1971.

46. Nutting, E.F. & Cammarata, "Effects of Prostaglandins on Fertility in Female Rats," *Nature* 222:287, April, 1969.

47. Sandberg, F., Ingelman-Sundberg, A., Ryden, G., "The Specific Effect of Prostaglandin on Different Parts of the Human Fallopian Tube," *J. Obstet. & Gynaec. Br. Comm.* 70:130, 1963.

48. Coutinho, E.M. & Maia, H. S., "The Contractile Response of the Human Uterus, Fallopian Tubes and Ovary to Prostaglandins in vivo," *Fertil. & Steril.* 22:9, September, 1971.

49. Pickles, V.R., "A Plain Muscle Stimulant in the Menstrual Fluid," *Nature,* 180:1198, 1957.

50. Elington, G., Raphael, R.A., Smith, G.N., Hall, W.J., Pickles, V.R., "The Isolation and Identification of Two Smooth Muscle Stimulants from Menstrual Fluid," *Nature,* 200:960, 1963.

51. Pickles, V.R., "Prostaglandins in the Human Endometrium," *Inter. J. Fertil.* 12:3, P. 335, 1967.

52. Pickles, V.R., Hall, W.J., Best, F.A., Smith, G.N., "Prostaglandins in Endometrium and Menstrual Fluid from Normal and Dysmenorrhic Subjects," *J. Obstet. & Gynaec. Brit. Comm.* 72:185, 1965.

53. Hawkins, D.F., "Relevance of Prostaglandins to Problems of Human Subfertility," Worcester Foundation for Experimental Biology Symposium, 1967. Prostaglandin Proceedings: Ramwell, P.W. & Shaw, J.E., ed. Wiley, 1968.

54. Bygdeman, M., Samuelsson, B., "Analyses of Prostaglandins in Human Semen. Prostaglandins and Related Factors," *Clin. Chem. Acta.* 13:465, 1966.

55. Bygdeman, M., Fredricsson, B., Svanborg, K. & Samuelsson, B., "The Relation between Fertility and Prostaglandin Content of Seminal Fluid in Man," *Fertil. & Steril.* 21:8, P. 622, 1970.

56. Karim, S.M.M., "The Identification of Prostaglandins in Human Umbilical Cord," *Br. J. Pharmac. Chemother.* 29:237, 1967.

57. Hillier, K., Karim, S.M.M., "Effects of Prostaglandins E_1, E_2, $F_1\alpha$, $F_2\alpha$ on Isolated Human Umbilical and Placental Blood Vessels," *J. Obstet. & Gynaec. Br. Comm.* 75:667, June, 1968.

58. Speroff, L., Ramwell, P.W., "Prostaglandins in Reproductive Physiology," *Amer. J. Obstet. & Gynec.* 107:7, P. 1111, 1970.

The influence of anesthesia on portal hemodynamics

By J. Varadhan, MD
Yvan J. Silva, MD
Detroit

The objectives of this study were to evaluate changes in portal pressure and flow resulting from induction of general anesthesia and dissipation of intra-abdominal pressure by laparotomy.

In 96 patients, extraperitoneal umbilical vein catheterization was carried out under local anesthesia. In 50 of these, liver biopsy confirmed normal histological architecture and in 46, cirrhosis. Portal pressures recorded in these patients averaged 16.08 ± 2.87 in the normal and 37.38 in the cirrhotic patients (cm/H_2O). Valsalva maneuvers caused a variable rise in both groups of patients correlating with the degree of muscular effort.

In 20 patients undergoing cholecystectomy, portal pressures and side portal flows were measured (1) with the patient apneic and (2) with tracheal insufflation to 25 mm Hg at celiotomy and after abdominal closure. Measurements were also made via the indwelling umbilical catheter on the first and second postoperative days.

Following closure of the abdomen, portal pressures were higher by 2.3 cm/H_2O avg. (range 0-9 cms) in the apneic state and 2.5 cm/H_2O avg. (range 0-9.5 cms) with tracheal insufflation. Following recovery from anesthesia, portal pressures were higher by 2.7 cm/H_2O avg. (range 0-5 cms). No change was observed in side portal flow following abdominal closure, but higher flows were recorded postoperatively.

In 10 patients pressures were measured via the umbilical vein in the intact unanesthetized state and again at laparotomy one and a half days to seven months later. In all instances pressures were lower both in the normal and cirrhotic patients.

These differences reflect the influence of general anesthesia on the splanchnic circulation and are of importance in interpreting the significance of portal pressure determinations during surgery for portal hypertension. We consider 22 cm/H_2O the upper limit of normal in measurements of portal pressure in intact unanesthetized patients.

The authors are associated with the Departments of Surgery of Wayne State University and Detroit General Hospital. Doctor Silva is director of medical education at DGH. Their research is supported by the Detroit General Hospital Research Corporation.

MICHIGAN
DEPARTMENT
OF PUBLIC
HEALTH

Monthly Surveillance Report

Cases of Certain Diseases Reported
To the Michigan Department of Public Health
For the Four-Week Period Ending July 28, 1972

	1972 This 4-Week Period	1971 Same 4-Week Period	1972 Total To Above Date	1971 Total Same Date	Total Cases for 1971
Rubella	33	95	1,229	2,536	2,955
Congenital Rubella Syndrome	0	0	0	1	1
Measles	105	221	1,946	2,198	2,659
Whooping Cough	11	9	63	62	140
Diphtheria	0	0	1	0	1
Mumps	133	160	2,620	9,342	10,748
Scarlet Fever & Strep Sore Throat	370	429	7,648	7,789	11,244
Tetanus	0	1	1	1	7
Poliomyelitis (paralytic)	0	0	0	0	0
Hepatitis	283	338	2,528	2,930	4,828
Salmonellosis (other than S. typhi)	61	54	452	370	691
Typhoid Fever (S. typhi)	0	1	5	3	10
Shigellosis	56	16	325	110	295
Aseptic Meningitis	13	24	52	78	239
Encephalitis	10	8	49	74	108
Meningococcic Meningitis	3	2	32	49	64
H. Influenza Meningitis	3	4	45	51	82
Tuberculosis	104	111	1,036	1,092	1,824
Syphilis	360	297	2,896	2,433	4,689
Gonorrhea	1,868	1,816	12,966	11,808	22,115

Information can be supplied by the local health department on the local incidence of disease.

Maurice Reizen, M.D., Director
Michigan Department of Public Health

Perinatal Tips

By Paul M. Zavell, MD
Detroit

The following case from the files of the Wayne County Medical Society Perinatal Mortality Committee is presented as an aid in continuing education.

Maternal

This was the third pregnancy for this 27-year-old, AB+, gravida III, para ii (iii) white mother. This pregnancy had been uneventful except for a few minor "colds" in the early weeks of the third trimester. At 39 weeks she went into labor with spontaneous rupture of her membranes. Sixteen hours, 15 minutes later, after an uneventful labor, she delivered her son. Medications received were (a) phenergan, 25 mgm intramuscularly (2 hours, 23 minutes before birth of the baby) and (b) one ampule of pitocin added late in the first stage of labor to an IV of 5% G/W.

Fetal

A five-pound, male infant appearing normal at birth with Apgar score of 10 at both 1 and 5 minutes was examined at three hours of age and pronounced normal in all ways by his pediatrician.

On the fourth day of life, however, trouble began. The nurses noted poor sucking that quickly progressed to complete cessation of all sucking attempts in 24 hours. Additionally a thick yellowish-white nasal mucus as well as a weak, shrill cry were soon noted. The pediatrician re-examined him making a diagnosis of "possible sepsis."

Chest and abdominal flat plate X-rays were normal. Intravenously, 50,000 units of aq. cry. penicillin in 10% G/W drip and 15 mgm Kantrex intramuscularly (both q 12 hr) were initiated as therapy. Two hours later nasopharyngeal, blood and urine cultures were taken (all were reported later as showing no growth). Bilirubin was 6.8 mgm % (6.4 indirect). A CBC showed Hgb. of 13.7 gm, Hct. of 36, WBC of 12,738 with 51 bands, 26 PMN, 01 Eosinophils and 22 lymphocytes. Urine was q.n.s. for S.G., Ph of 6.0, protein 2+, sugar 2+, and microscopic of 8-10 WBC and 2-4 RBC/HPF.

Late on the sixth day, until death on the eighth day, frequent apneic spells occurred despite oxygen. Sucking, however, returned on the seventh day so that the infant was successfully restarted on oral fluids (glucose water and then half-strength formula).

Intravenous fluids were stopped and both antibiotics were given intramuscularly. Late on the seventh day the infant had a severe choking-apneic spell while on half-strength formula. A chest X-ray showed "—unclassified pulmonary disease has developed from the last study. The appearance suggests inflammation."

Because of the continued apneic spells a blood sugar was done on the eighth day just before death. It was reported back as 20 mgm. Following death at autopsy "diffuse patchy necrosis of lungs, liver and adrenal glands" were found but "no intranuclear inclusions" were found. Special stains for bacteria were negative on samples of the tissues involved with necrosis. Although a definite diagnosis could not be made the lesions were suggestive of generalized Herpes Simplex infection or possible Bacterium Listeria Monocytogines.

Perinatal Committee Comments

1. It was not clear here if such is the case but to add Pitocin merely to "hurry up" the delivery is not good obstetrical practice.
2. All cultures should be drawn *before* antibiotics are started. Otherwise these cultures may well be worthless.
3. Infants with unexplained apneic spells should have appropriate studies done. These may vary but blood glucose, calcium, phosphate as well as a skull X-ray and a spinal tap should be seriously considered.
4. Additional diagnoses suggested by this case that could have been entertained during life with appropriate studies initiated were: duodenal atresia, regurgitation with aspiration pneumonia, T-E-F, obstructive uropathy and subacute infantile necrotizing encephalopathy.

Doctor Zavell is chairman, Neo-Natal and Hospital Care Committee, Michigan Chapter, A.A.P., and chairman, Perinatal Mortality Study Committee, Wayne County Medical Society.

Value of the coronary care unit in a small community hospital

By John J. Rick, MD
Coldwater

As a result of the many reports concerning the efficacy of coronary care units (C.C.U.) in reducing the mortality from acute myocardial infarctions,[1,2,3] our small community hospital decided to establish its own specialized unit for such care. A survey of all myocardial infarction treated in our hospital for the 24 months preceding the opening of our coronary care unit revealed a mortality rate of 38%.

Our coronary care unit was opened in July, 1969, and has been in continuous operation since that time. All admissions to the unit for the first 18 months of operation were reviewed by the author. This review included evaluation of history, clinical findings, serum enzymes studies, and all electrocardiograms. Of a total of 183 admissions to the C.C.U. there were 92 proven cases of acute myocardial infarction. The mortality rate from these 92 cases was only 14%, a 24% reduction over the pre-C.C.U. mortality rate. (See **Table 1**).

Table 1
Mortality Percentages

	Number	%
Total number of proven coronaries	92	100%
Patients discharged from C.C.U. alive	81	88%
Patients discharged from hospital alive	79	86%

In order to better evaluate the reasons for this improvement in our statistics, a brief discussion of our unit and how it operates is indicated.

Coronary Care Unit

Design: The original unit was a two-room suite containing three beds, and was converted from two adjacent rooms on a general medical floor. The unit was designed to be entirely self-contained with full time electrocardiographic monitoring on all patients. The unit contained all of its own emergency equipment including drugs, pacemaking devices, and defibrillators.

Staffing: The nursing staff was all specially trained to work in a C.C.U. with special emphasis on the recognition and treatment of arrhythmias. At least one professional C.C.U. nurse was on duty in the unit at all times. Since our hospital had no house staff, the nursing staff was given the added responsibility of initiating treatment for hazardous arrhythmias including electrical defibrillation for ventricular tachyarrhythmias in the unconscious patient.

Physicians: The private physician of all patients in the C.C.U. remained the physician-in-charge. There was an appointed director of C.C.U. who made daily rounds, reviewing all orders and determining the need for formal consultation.

General Policies: All suspected myocardial infarctions were eligible for admission to the unit. If the unit was full, bed allocation was decided by the director of the unit. Ideally, all proven myocardial infarctions were to remain in the unit for a total of six days or longer if there were complications, i.e., a serious arrhythmia or a serious degree of cardiac decompensation. All admissions had serial electrocardiograms and enzymes studies including SCOT, CPK, and LDH for the first three days. All admissions had an intracatheter inserted and this was maintained patent by a suitable intravenous solution.

Diagnostic Criteria: The criteria for establishing a diagnosis of an acute myocardial infarction were those proposed by Lown and his group.[4] All patients were evaluated after three days to determine who was eligible to remain in the unit. The criteria used to establish the diagnosis of an acute myocardial infarction were:

1. History of characteristic chest pain and electrocardiographic changes.
2. History of characteristic chest pain and typical enzyme changes.
3. Enzyme and electrocardiographic alterations in the absence of chest pain.
4. Clinical shock resulting in early demise without adequate explanation other than myocardial infarction.

All of our patients falling in Category 4 were autopsied with confirmatory evidence of either recent myocardial infarction and/or recent coronary artery occlusion.

Discussion

The 14% mortality in our initial 18 months'

Doctor Rick is in private practice in Coldwater.

experience in the C.C.U. (**Table 1**) was felt to be attributed to many factors. However, the ability of the professional C.C.U. nurse to recognize potentially hazardous arrhythmias and to prevent these arrhythmias from developing into fatal episodes of cardiac arrest was the predominant reason for this reduction.

In a small hospital environment, where no permanent house staff is available, the control of this problem of the electrically unstable heart becomes the responsibility of the professional C.C.U. nurse. The nursing staff has to be adequately trained to recognize these unstable rhythms, has to be aggressive enough to initiate treatment, and must have the support of the medical staff in this aggressive treatment program.

In comparison with C.C.U. mortality statistics reported from larger hospitals with permanent house staffs[4,5] our hospital's record seems comparable.

Table 2
Mortality by Sex and by Decade

	Male			Female		
Decade	**Alive**	**Dead**	**% Deaths Decade**	**Alive**	**Dead**	**% Deaths Decade**
Under 30	0	0	0	0	0	0
30-39	1	0	0	0	0	0
40-49	8	1	11%	1	0	0
50-59	24	3	11%	5	0	0
60-69	15	4	21%	6	0	0
70-79	8	1	11%	9	2	22%
Over 80	1	2	67%	1	0	0
Total	57	11		22	2	

Table 2 shows that a large majority of our patients were males (74%) and that the median age was 57 years, which is somewhat lower than that reported by Killip and Kimball.[5] The mortality by sex and decade (**Tables 2 and 3**) reveals a much higher mortality among male admissions and, excluding the 80 year and older group, this male mortality was higher in a younger age bracket than with female admissions.

Table 3
Mortality by Sex Alone

	Admissions	% Death Total Admissions	% Death By Sex
Male	74% (68)	12%	20%
Female	26% (24)	2%	9%

Our greatest mortality occurred in those patients admitted with pulmonary edema. Six of these seven patients (**Table 4**) also had accompanying cardiogenic shock and all seven of these patients survived less than 48 hours after admission to the C.C.U. These seven cases comprised 50% of our total mortality, which again is comparable with other series reported.[4,5]

Table 4
Mortality by Severity of Clinical Findings

Grade 0 = No failure clinically or by X-ray
Grade I = Failure by X-ray only
Grade II = Fine, minimal rales clinically and X-ray findings
Grade III = Wet, diffuse clinical rales
Grade IV = Pulmonary Edema with or without shock

Grade	Alive	Dead
0	15 (16%)	0
I	26 (28%)	0
II	27 (30%)	3 (4%)
III	11 (12%)	2 (3%)
IV	0	7 (7%)
Total	79 (86%)	13 (14%)

Summary

A retrospective study involving the first 18 months of operation of a three-bed coronary care unit in a small community hospital demonstrated a significant reduction in mortality from acute myocardial infarctions. Only proven acute myocardial infarctions, by the criteria established by Lown, were included in this study.

For the two years preceding the opening of this unit, the mortality rate from acute myocardial infarctions treated in the general hospital area was 38%. The first 92 consecutive myocardial infarctions treated in the coronary care unit in this 18-month period showed a reduction in mortality rate to 14%. This mortality rate was equally divided between cardiogenic shock (7%) and electrical deaths (7%).

The author felt that this reduction in mortality was largely attributed to the development of a highly skilled, well motivated nursing staff that was trained to properly interpret arrhythmias, initiate proper treatment measures including use of intravenous bolus lidocaine and electrical defibrillation, and properly performed resuscitative measures until the doctor could be summoned.

The success of such a unit in the hospital without a full-time house staff depends on: (1) highly-trained coronary care nursing personnel, and (2) physicians willing to support these nurses in the aggressive management mandatory in treating patients with acute myocardial infarctions.

References

1. Day, H.W.: An Intensive Coronary Care Area. *Dis. Chest.* 44:423, 1963.
2. Meltzer, L.E.: Concepts and Systems for Intensive Coronary Care. *Acad. Med. New Jersey Bull.* 10:304, 1964.
3. Lown, B., Fakhro, A.M., Hood, W.B., Jr., and Thorn, G.W.: The Coronary Care Unit. New Perspectives and Directions. *J.A.M.A.* 199:188, 1967.
4. Lown, B., Vassaux, C., Hood, W.B., Jr., Fakhro, A.M., Kaplinsky, E., and Roberge, G.: Unresolved Problems in Coronary Care. *Am. Jour. Cardiology.* 20:494, 1967.
5. Killip, T. III, and Kimball, J.T.: Treatment of Myocardial Infarction in a Coronary Care Unit. A Two Year Experience with 250 Patients. *Am. Jour. Cardiology.* 20:457, 1967.

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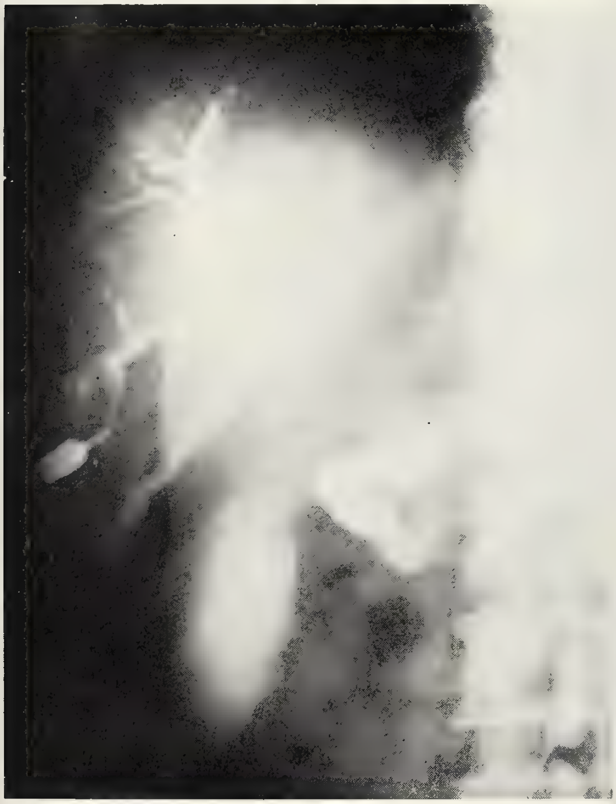

The viewbox

By Raymond S. Kurtzman, MD
Detroit

Diagnosis

Common bile duct obstruction (caused by carcinoma of the pancreas) shown by transhepatic cholangiography.

X-Ray Findings

There is a relatively smooth obstruction of the common bile duct, with dilatation of its intra- and extra-hepatic branches and of the gall bladder.

Discussion

The primary uses of transhepatic cholangiography are to distinguish between obstructive and non-obstructive jaundice, to delineate the point of obstruction, and to give information about its cause.

The procedure requires the percutaneous introduction of a needle, usually by a subcostal approach, into the liver. The dilated ducts of obstructive jaundice are relatively easy to puncture. Bile can then be aspirated and radiographic contrast material injected under fluoroscopic control with the exposure of appropriate roentgenograms. The needle can be replaced with a soft catheter for longer term bile drainage.

The normal or small intrahepatic bile ducts of non-obstructive or of hepatocellular jaundice are relatively difficult to enter and accept only small amounts of contrast material. Although the examination has been shown to be relatively safe, the complications include hemorrhage, bile leakage and peritonitis, and infection. Therefore, it is wise to be prepared to perform the procedure just prior to scheduled surgery, which can then be done if the examination is positive, with a better understanding of the underlying disease. If the study is negative, surgery need not be performed at all, unless a complication develops.

References

Evans, J. S., "Transhepatic Cholangiography" in *Alimentary Tract Roentgenology*. Margulis, A. R. and Burhenne, H. J., eds. The C. V. Mosby Company, St. Louis, 1967, pp. 985-1002.

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Doctor Ahronheim describes them:

What exactly are the duties of the deputy medical examiner?

(EDITOR'S NOTE: At the end of 1972, Michigan's Medical Examiner system must be complete and functioning. J. H. Ahronheim, MD, Jackson pathologist and leading proponent of the medical examiner system, has summarized the duties of deputy medical examiners in the following paper, a guide to physicians who may be urged to make the system work by serving as deputy medical examiners. The article originally appeared in the May issue of the Jackson County Medical Society's IATERIA.)

When called to the scene of a fatality, the deputy medical examiner must first acquaint himself with all the facts, before he concentrates on the body of the deceased—not unlike the proverbial "history and physical," which is performed routinely on every new patient.

He may get the necessary preliminary information from any one or more of the following sources: 1. law enforcement officers; 2. members of the family; 3. family physician; 4. witnesses; 5. his own observations. If necessary, he may wish to consult hospital records later. There is a good chance that most of the information will already have been obtained by the police officers and be available by the time he reaches the scene.

He must be sure to write down whatever information is given or he may have obtained himself. This should include the time, when he received the call, the time of his arrival at the scene, the names and addresses of people he talks to, objects of circumstances immediately noticeable, the time of completion of his investigation.

Knowing the facts, as far as they are obtainable at that time, the deputy examiner will then turn his attention to the body of the deceased. He must pronounce him dead, marking down the exact time. He must try to arrive at a diagnosis. In cases of sudden unexpected death, the examiner may inquire about previous illnesses; search the deceased's pockets for medication; examine his skin for needle punctures and scars; examine for external trauma. The examiner must try to get an impression as to whether he is dealing with a natural or unnatural death; if the death is unnatural, whether it is one of accident, suicide or homicide.

In determining whether an autopsy is to be done, the deputy medical examiner may let the following rules serve as a guide:

1. An autopsy is mandatory in all cases of homicide or suspicious circumstances.
2. If, after thorough investigation, no diagnosis is available, and the examiner has no idea as to how to sign the death certificate, he has no choice but to order an autopsy.
3. If there is the possibility of litigation, such as with a surviving driver in a traffic fatality, an autopsy might be advisable to avoid embarrassing moments in court later on. The deputy examiner will have to make the final decision.
4. While police officers or the prosecutor have no authority to order an autopsy, they may suggest or request one; it would be wise to comply.
5. In cases associated with unusual circumstances or those in which well known persons are involved, an autopsy is always desirable for the physician's and the county's protection. Just think of the tragedy of Chappaquiddick, in which Senator Edward Kennedy played a prominent role, and which a poorly informed deputy medical examiner labeled a "closed case" after relatively casual investigation.

There may be other circumstances making an autopsy advisable. There may be questions such as: Was the body dead at the time the apparent violence took place? Who was the first to die in a case of double or multiple fatality? Has there been a condition, which could have precipitated a traffic death, such as a heart attack or a stroke? Was the person killed in a traffic accident the driver or not? (a question which is not always easy to answer). Most of these questions can not be answered without a post mortem examination.

You should also not forget that agencies other than the police and the court authorities may have an interest in the results of the autopsy, as traffic authorities, health department, compensation boards, insurance companies, medical centers.

If an autopsy is ordered, the examiner may request the pathologist to obtain a specimen of blood for toxicological examination. If there is no autopsy, the taking of a specimen will be the examiner's responsibility, and he will be wise in carrying a blood drawing kit with him. In traffic fatalities, it may often be desirable to take blood specimens from persons other than the deceased, as a surviving driver. Here, the physician must be aware of the fact that a living person can not be forced into submitting to a phlebotomy, but that the recently passed Implied Consent Law is a mighty powerful tool of persuasion. When and from whom to obtain a blood specimen, is a matter of the physician's

(Continued on Page 796)

Here's reminder: the complete list of reportable diseases

The following list of "reportable diseases" is published here as a reminder to Michigan physicians, at the suggestion of the MSMS Committee on Public and Environmental Health.

- Anthrax
- Botulism
- Cancer
- Chickenpox
- Cholera
- Dengue
- Diphtheria
- Dysentery, Amebic
- Dysentery, Bacillary
- Encephalitis, infectious
  - Primary
  - Secondary
  - Undetermined
- Epidemic keratoconjunctivitis
- Foodborne diseases and food poisonings
- Fungus infections, systemic
  - Actinomycosis
  - Blastomycosis
  - Coccidioidomycosis
  - Histoplasmosis
  - Other (Including severe cutaneous forms with systemic manifestations)
- Hepatitis, infectious
- Hepatitis, serum
- Infectious jaundice (Weil's disease, leptospirosis)
- Leprosy
- Malaria
- Measles
- Meningitis, all forms
  - Aseptic
  - Meningococcal
  - Tuberculous
  - Other bacterial and unspecified purulent forms
- Mumps
- Neonatal infections (first 28 days of life)
  - Ophthalmia neonatorum (Gonorrheal)
  - Diarrhea of newborn
  - Staphylococcol disease
- Occupational diseases
- Pertussis (whooping cough)
- Plague
- Poliomyelitis
- Post partum infections
  - Puerperal streptococcic infections
  - Staphylococcus disease
- Q fever
- Rabies (both human and animal)
- Rheumatic fever, acute
- Rocky Mountain spotted fever
- Rubella (German Measles)
- Salmonella infections (except those due to S. Typhi)
- Scarlet fever, and other hemolytic Streptococcal infections of the upper respiratory tract and erysipelas
- Smallpox
- Tetanus
- Trachoma
- Trichinosis
- Tuberculosis
- Tularemia
- Typhoid fever (due to S. Typhi)
- Typhus
- Undulant fever (Brucellosis)
- Venereal diseases
  - Chancroid
  - Gonorrhea
  - Granuloma inguinale
  - Lymphagranuloma venereum
  - Syphilis
- Yellow fever

MEDICAL EXAMINER/continued

own personal judgment. If in doubt, he should take it; he can always discard it. Then he should hand it to the police officer, after he has it properly marked with his and the individual's name and the time it was obtained. The officer will see to it that it will be submitted to the toxicologist.

The case will not be complete, until the reports from all ancillary services, which may have had a part in the investigation, are in the doctor's hands. He will then summarize all evidence and submit his own report to the chief medical examiner. Special printed forms will be available for that purpose in due time.

The deputy medical examiner is not expected to be a forensic expert. He should be able to do an adequate job, however, if he uses the two qualities which he, as a physician, surely has: medical knowledge and common sense. That places him at least one point above the lay coroners, who have handled the forensic cases in the community, as long as there has been a community. Let the following rules guide:

1. Don't try to be a detective; leave that to the professionals.
2. Cooperate with the law enforcement agencies, as they will cooperate with you. Consider yourself a member of the investigating team.
3. Write down all your observations; you'll never know when it may come in handy to have everything black on white.
4. Keep your report to the chief medical examiner as concise as possible and refrain from long-winded stories.
5. Keep all cases and their various reports on file, where you can lay your hands on them at a moment's notice.
6. Feel free to order autopsies as you consider them indicated, but don't forget that every autopsy is an expense to the taxpayer, and should not be ordered without adequate justification.

The SAMA - MECO summer experience

A personal account by two Michigan medical students

Ninety-two medical students are returning to classes at medical schools in Michigan this fall with a new view of medical practice in Michigan communities. They have been participating in the 1972 Student American Medical Association Project for Medical Education and Community Orientation. The Michigan State Medical Society arranged for hospital placement of students and MSMS physician members supervised their summer educational programs.

Here are two of the students' reports:

Bryan P. Shumaker, 22, of Southfield, who is beginning his second year at the Michigan State University College of Human Medicine, writes of his experiences at Alpena General Hospital where his program was supervised by Frederick C. O'Dell, MD. Before beginning his medical studies, Shumaker earned a B.A. in history from Wayne State University. He served as coordinator for 1972 participation by MSU students.

Drawings by Mark Campbell, 23, of Farmington, tell of his summer at Highland Park General Hospital, where he and two other students were supervised by Jack Shapiro, MD. Campbell, a second year student at the Wayne State University School of Medicine, majored in biochemistry and art in his undergraduate work at Michigan State University.

By Bryan P. Shumaker
MSU College of Human Medicine

Cartoons and captions
By Mark Campbell

It was with some degree of trepidation that I arrived in Alpena to start my summer as the SAMA-MECO student assigned there.

All my life I had lived in or near Detroit, and the thought of living in a "small town" (about 15,000 people) made me somewhat uneasy. Would the people accept me? What was there to do? What kind of medicine was practiced? What had one year of med school done for me?

Needless to say, I was rather surprised and delighted with my entire stay, and I hope to give a rough summary of what my summer was like as a SAMA-MECO extern.

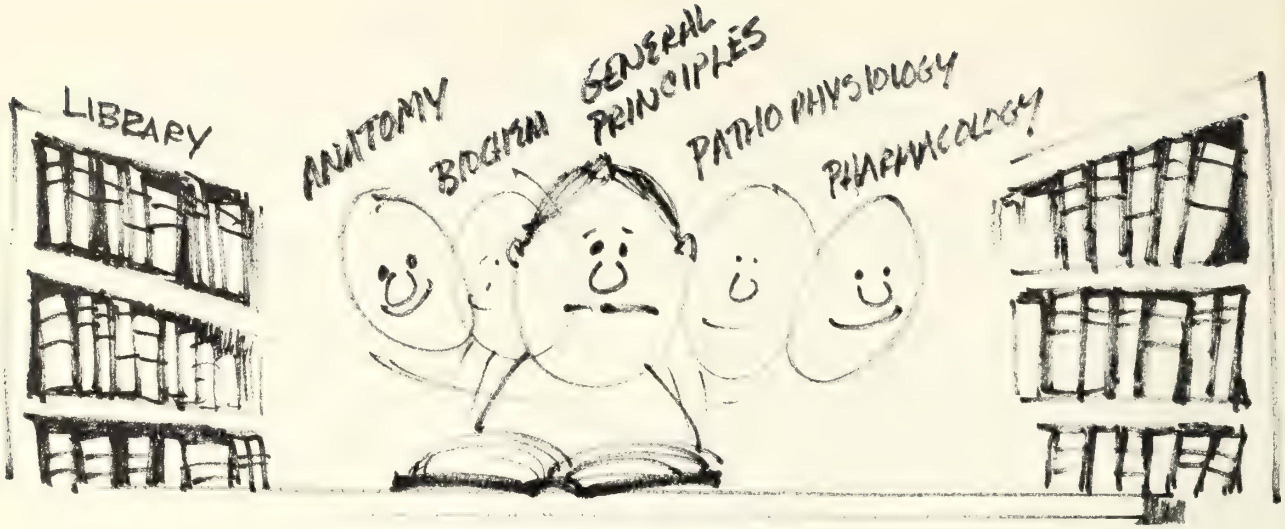
I was fortunate in being able to decide where I wanted to go for the summer, and informed sources (notably Alpena's extern from last year) highly recommended it. Also, I was told that there was an abundance of sailing, fishing, horseback riding and the like—all of which I enjoy immensely and subsequently filled my free weekends with.

Frederick C. O'Dell, MD, was the program director, and with him I arranged a broad and varied program. There were two weeks of general practice, one week of internal medicine, one week of orthopaedics, one week of anesthesia, one week of obstetrics and gynecology, one week in the labs, two weeks of surgery and one week layering on mental health, urology and ophthamology.

Naturally, every med student is curious and anxious to know how much (or how little) the first year of med school has given him in dealing with the actual practice of medicine. I realized that

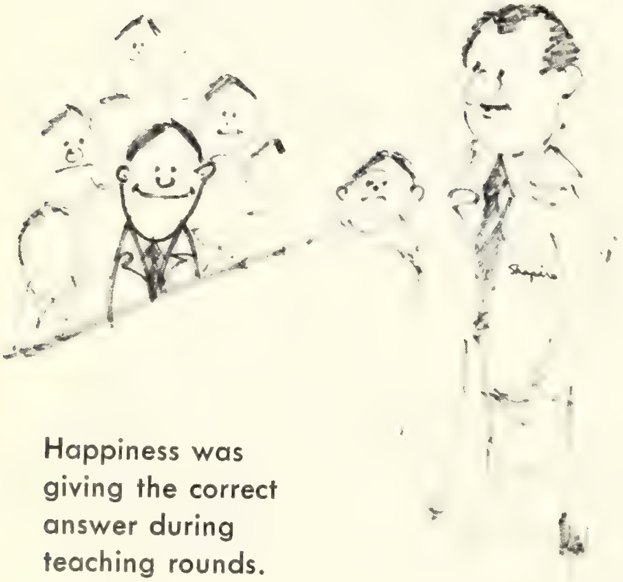
'The first day of the rest of my life'

The first day working in a hospital as an "Embryo Doctor"



There was so much to see and experience that review was necessary to correlate your increasing clinical findings with your basic science foundation.

Study alone was not enough. Some skills had to be learned by practice.



Happiness was giving the correct answer during teaching rounds.

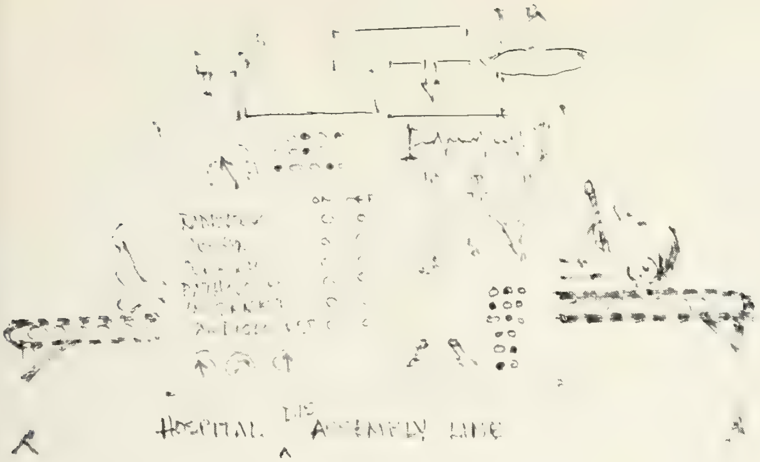
I knew very little, but was curious to see of what I had, how much was "relevant."

My school (Michigan State University) puts a strong emphasis on family medicine and gives us a good clinical introduction in the first year. Exposed to a variety of innovative teaching techniques and approaches and armed with a brand new ophthalmoscope and stethoscope, I hoped to be able to at least "hold my own" on the floors.

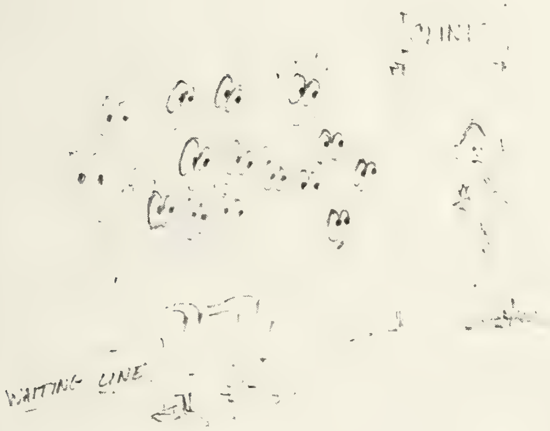
I lived in the hospital on the mental health unit, which rather unsettled me at first when I realized the doors locked from the *outside* and not from the inside. However, it was available, and even more important to any student, it was free. The advantage to living in the hospital was that I could easily be contacted when something interesting came in.

My first week was spent in a family medicine group practice clinic, and there I rotated among the various doctors. Although initially I just observed, I was soon able to sharpen my physical examination skills. It was very interesting and extremely enlightening to see how different physicians handled patients in different ways.

A typical day consisted of either rounds or surgery starting about 8 a.m., possibly office hours before lunch, resuming in the office about two or so, and seeing patients till about 5:30 p.m. Quite often, the physician I was with would be on emergency room call, and this would punctuate the day (and night) sporadically and frequently.



I gained an appreciation of the interdependence and cooperation between specialties.



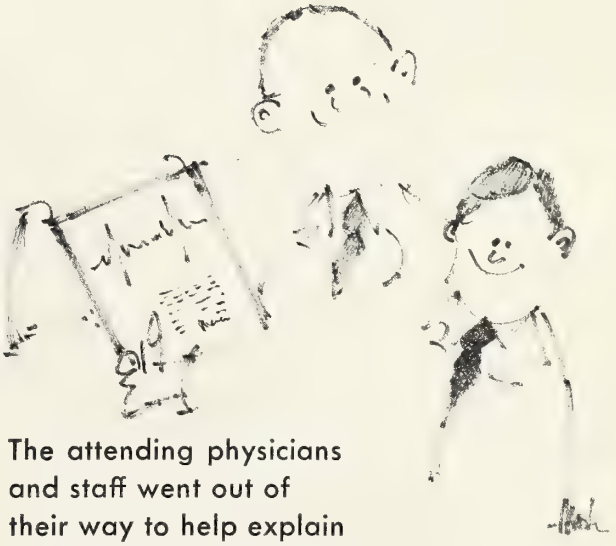
Many times I wished I could be of more help.

(Impatient patients could give you the coldest stare if you looked like a doctor and were not helping them.)

Rather naively, I had assumed a small-town practice of medicine would not be as hectic as a practice in a large population area. It took me each weekend to recuperate. Actually, I had asked to be called if anyone was ready to deliver, if all hell broke loose in the emergency room, or if they needed help up in surgery for emergencies. Many of my nights were spent up around the hospital.

Everyone there was very friendly and co-operative. The first few weeks I was invited out to dinner almost every night by the staff and other hospital employees, which I gratefully accepted. The hospital food was surprisingly good. At what other hospital do you see prime rib, roast duck with wild rice dressing, and veal cutlet cordon bleu on the menu?

So the weeks progressed. One physician (the internist) assigned me "my own" patient to work up, admit to the hospital, determine the cause of her hypertension, treat, and finally discharge. It was such exercises as these that really made me feel like I was accomplishing something. One especially good thing was a note I always received whenever any one of the physicians (whether I was assigned to them or not) had a patient with something interesting or unusual to see. I felt big spleens and livers, heard all sorts of heart murmurs, felt masses, did fundoscopic exams on Grade III hypertensives, and in general got to see a great deal (I even made a few good diagnoses—an aortic



The attending physicians and staff went out of their way to help explain and correlate our studies.

> I have had
> so many great experiences
> that are unexplainable and
> boring to friends, . . . yet
> common place and boring
> to the staff. So when
> I get together with my
> fellow students, that is
> all we talk about.

[FRIENDS]
[STAFF]

stenosis, hyperthyroidism, and claudication of the internal iliacs).

When I look back, there are many incidents that stand out in my mind. My first delivery (I'd lost count by the end of the summer; there must have been fifteen, even!) left me drenched with perspiration.

There were plenty of rough situations, too. The ruptured aortic aneurysm we lost on the table, the breech delivery with the prolapsed cord, the dead-on-arrivals from accidents we saw in the emergency room, the wound infections, the fatal coronaries, and the talking to bereaved families.

In retrospect, what did I learn? I learned many technical things: how to put in a chest tube, how to draw blood, give spinals, anesthetize patients, suture lacerations, examine patients and write orders. But I also learned how to talk to and deal with people, to be sympathetic, when to be firm. Perhaps more importantly, I learned that there isn't necessarily only one right way to do something, and that the quality of medical care was much better than I had expected.

I saw things I'd only heard about in school—youngsters with mottled teeth from tetracycline treatment, a cecal volvulus, and a neglected congenital hip dislocation in a three year old with all its accompanying complications.

By the end of the summer I was surprised how much of my first year courses were really worthwhile and relevant; not only did the experience bolster my faith in med school academic courses, it made me glad to know I remembered some of it and even more importantly, this practical understanding and use of theoretical concepts added substance and meaning to those courses. I learned to question, not to accept something dogmatically because it's in a textbook, but to realize there are other opinions and other ways.

My summer turned out to be a most educational, enlightening, and enjoyable one. It left me frustrated—frustrated that I didn't have such courses as pathology or pharmacology yet, but it was the kind of frustration that let me return to the "grind" in the fall with a greater sense of enthusiasm and purpose.

Medico·legal

The AMA's *Citation* newsletter, prepared by the AMA Law Department, lists the following cases involving health personnel in Medicine. Persons interested in obtaining more information on individual cases may write MSMS headquarters.

"Pathologist's report
may be admitted into evidence"
Michigan Court of Appeals, Aug. 23, 1971
from the *Citation,* May 1, 1972

"Prohibition of billboard/abortion
information held unconstitutional"
District Court, Jan. 5, 1972
from the *Citation,* May 15, 1972

"Expert testimony required
in surgical malpractice case."
Michigan Court of Appeals, June 21, 1971
from the *Citation,* June 1, 1972

"Malpractice statute of limitations
inapplicable to imposter dentist."
Michigan Court of Appeals, Aug. 24, 1971
from the *Citation,* June 1, 1972

"Chiropractor commits
indecent acts with patients"
Michigan Court of Appeals, Oct. 27, 1971
from the *Citation,* June 1, 1972

"Medical Center owner liable
for surgeon's negligence"
Michigan Court of Appeals, Jan. 17, 1972
from the *Citation,* June 15, 1972

"Malpractice suit not barred
by release of third party"
Michigan Court of Appeals, Nov. 22, 1971
from the *Citation,* June 15, 1972

"Tape recording of questioning
at physical exam not permitted"
Michigan Court of Appeals, Nov. 23, 1971
from the *Citation,* June 15, 1972

"Chiropractor testifies
in personal injury case"
Michigan Court of Appeals, June 25, 1971
from the *Citation,* July 1, 1972

"Interns, residents and fellows
may not form union in Michigan"
Michigan Court of Appeals, Jan. 21, 1972
from the *Citation,* July 1, 1972

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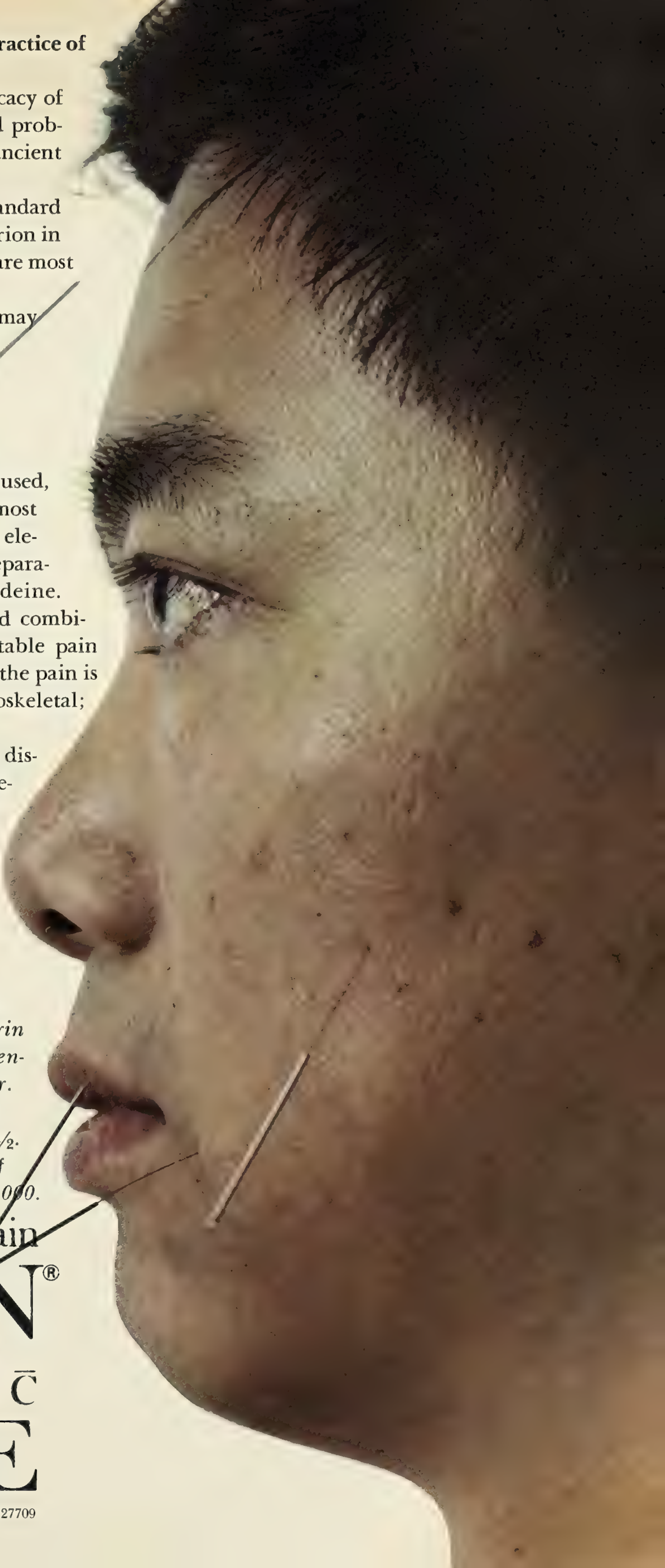

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Worry, frustration, job pressure—all set up excessive vagal currents in patients with peptic ulcer.

Pro-Banthīne "insulates" the stomach, the duodenum and the lower intestinal tract—the sites where these destructive currents take their toll.

This "insulation" helps block excessive enteric activity and acidity, thus helping to provide the proper environment for the healing of peptic ulcers.

It's nice to know that Pro-Banthīne provides this protection at a dosage that causes little or no discomfort and that, unlike ataractic agents, Pro-Banthīne does not cloud the patient's awareness or thought processes.

By moderating excessive vagal currents Pro-Banthīne relieves spasm, acid burn and pain. By reducing gastric motility Pro-Banthīne also prolongs the activity of antacids.

Indications: Pro-Banthīne is effective as adjunctive therapy in the treatment of peptic ulcer. Dosage must be adjusted to the individual.

Contraindications: Glaucoma, obstructive disease of the gastrointestinal tract, obstructive uropathy, intestinal atony, toxic megacolon, hiatal hernia associated with reflex esophagitis or unstable cardiovascular adjustment in acute hemorrhage.

Warnings: Patients with severe cardiac disease should be given this medication with caution. Fever and possibly heat stroke may occur due to anhidrosis.

In theory a curare-like action may occur, with possible loss of voluntary muscle control. For such patients prompt and continuing artificial respiration should be applied until the drug effect has been exhausted.

Diarrhea in an ileostomy patient may indicate obstruction, and this possibility should be considered before administering Pro-Banthīne.

Precautions: Since varying degrees of urinary hesitancy may be evidenced by elderly males with prostatic hypertrophy, such patients should be advised to micturate at the time of taking the medication.

Overdosage should be avoided in patients severely ill with ulcerative colitis.

Adverse Reactions: Varying degrees of drying of salivary secretions may occur as well as mydriasis and blurred vision. In addition the following adverse reactions have been reported: nervousness, drowsiness, dizziness, insomnia, headache, loss of the sense of taste, nausea, vomiting, constipation, impotence and allergic dermatitis.

Dosage and Administration: The recommended daily dosage for adult oral therapy is one 15-mg. tablet with meals and two at bedtime. Subsequent adjustment to the patient's requirements and tolerance must be made.

How Supplied: Pro-Banthīne is supplied as tablets of 15 and 7.5 mg., as prolonged-acting tablets of 30 mg. and, for parenteral use, as serum-type vials of 30 mg.

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GREATER NEUTRALIZING IMPACT

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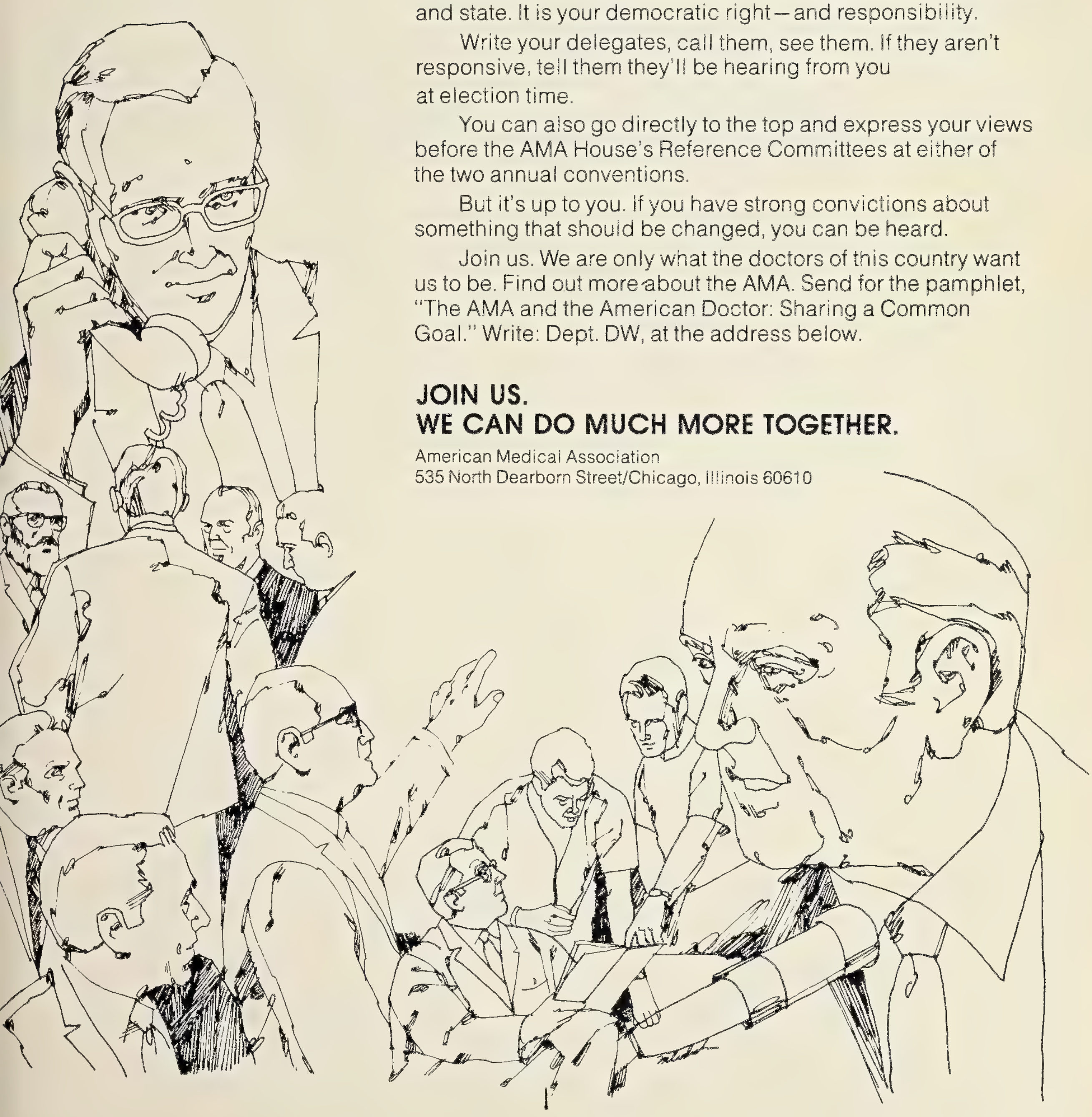


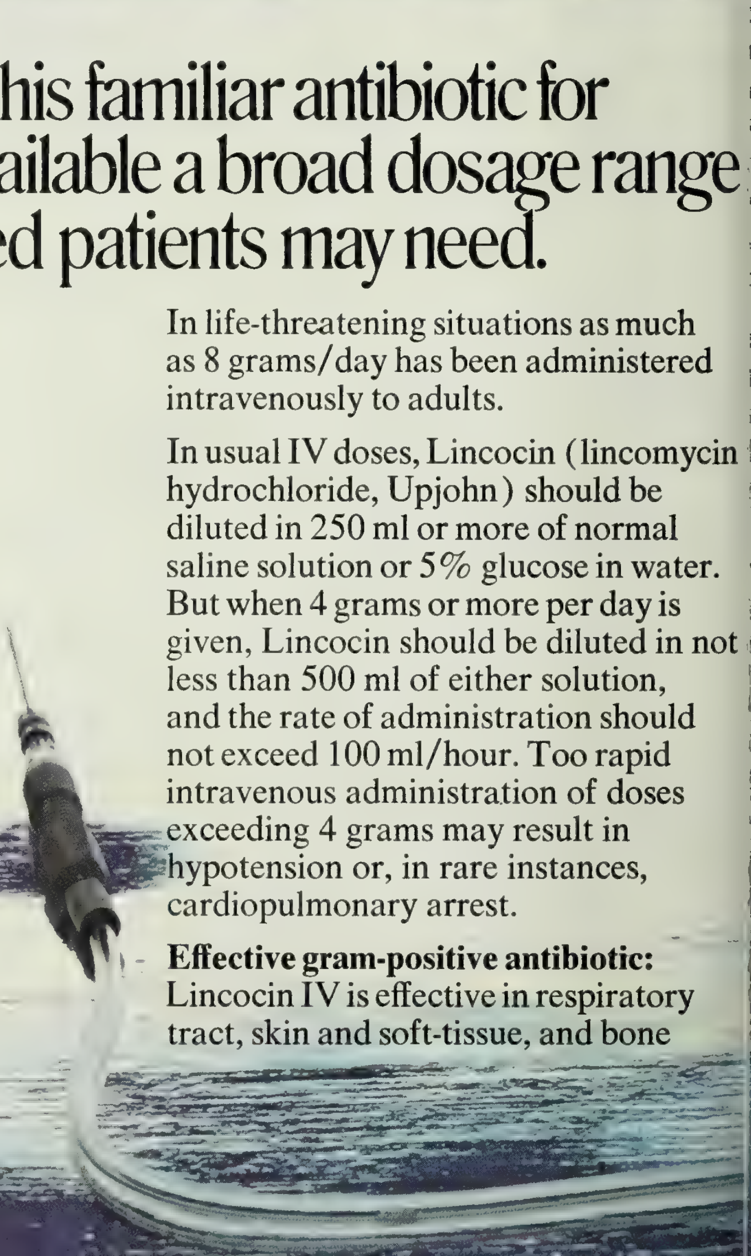
When you select this familiar antibiotic for IV infusion you have available a broad dosage range that hospitalized patients may need.

Intravenous Lincocin (lincomycin hydrochloride, Upjohn), with its 1.2 to 8 grams/day dosage range, covers many serious and even life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. Lincocin IV therefore can be as useful in your hospitalized patients as its IM use has proved to be in your office patients. As with all antibiotics, *in vitro* susceptibility studies should be performed.

1.2 to 8 grams/day IV dosage range: Most hospitalized patients with uncomplicated pneumonias respond satisfactorily to 1.2 to 1.8 grams/day of Lincocin IV. These doses may have to be increased for more serious infections. In life-threatening situations as much as 8 grams/day has been administered intravenously to adults.

In usual IV doses, Lincocin (lincomycin hydrochloride, Upjohn) should be diluted in 250 ml or more of normal saline solution or 5% glucose in water. But when 4 grams or more per day is given, Lincocin should be diluted in not less than 500 ml of either solution, and the rate of administration should not exceed 100 ml/hour. Too rapid intravenous administration of doses exceeding 4 grams may result in hypotension or, in rare instances, cardiopulmonary arrest.

Effective gram-positive antibiotic: Lincocin IV is effective in respiratory tract, skin and soft-tissue, and bone



infections caused by susceptible strains of pneumococci, streptococci, and staphylococci, including penicillin-resistant strains. Staphylococcal strains resistant to Lincocin (lincomycin hydrochloride, Upjohn) have been recovered. Before initiating therapy, culture and susceptibility studies should be performed. Lincocin has proved valuable in treating patients hypersensitive to penicillin or cephalosporins, since Lincocin does not share antigenicity with these compounds. However, hypersensitivity reactions have been reported, some of these in patients known to be sensitive to penicillin.

Well tolerated at infusion site: Lincocin ntravenous infusions have not produced local irritation or phlebitis, when given as recommended. Lincocin s usually well tolerated in patients who are hypersensitive to other drugs. Nevertheless, Lincocin should be used cautiously in patients with asthma or significant allergies.

In patients with impaired renal function, he recommended dose of Lincocin should be reduced to 25–30% of he dose for patients with normal kidney function. Its safety in pregnant patients and in infants ess than one month of age has not been established.

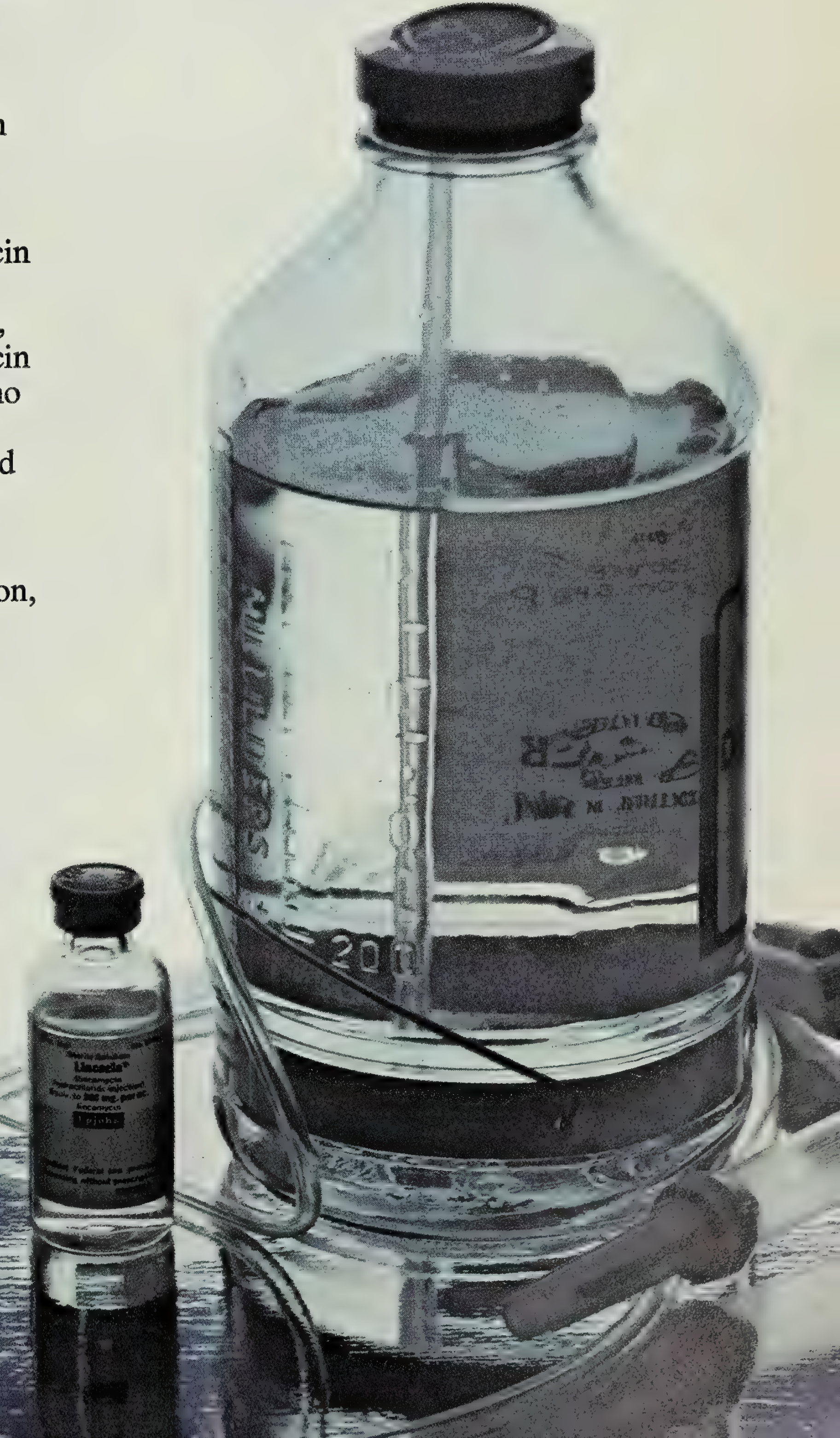
Lincocin may be used with other antimicrobial agents: Since Lincocin s stable over a wide pH range, it is uitable for incorporation in ntravenous infusions; it also may be administered concomitantly with other antimicrobial agents when indicated. However, Lincocin should not be used with erythromycin, as *in vitro* antagonism has been reported.

Lincocin®

Sterile Solution (300 mg per ml)

(lincomycin hydrochloride, Upjohn)

For further prescribing information, please see following page.



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Sterile Solution (300 mg. per ml.)

Lincocin®

(lincomycin hydrochloride, Upjohn)

Up to 8 grams per day by IV infusion for hospitalized patients with life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. As with all antibiotics, *in vitro* susceptibility studies should be performed.

Each preparation contains:	Lincomycin hydrochloride monohydrate equivalent to lincomycin base
250 mg Pediatric Capsule	250 mg
500 mg Capsule	500 mg
*Sterile Solution per 1 ml	300 mg
Syrup per 5 ml	250 mg

*Contains also: Benzyl Alcohol 9 mg; and, Water for Injection—q.s.

Lincocin (lincomycin hydrochloride) is indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed. Cross resistance has not been demonstrated with penicillin, ampicillin, cephalosporins, chloramphenicol or the tetracyclines. Some cross resistance with erythromycin has been reported. Studies indicate that Lincocin does not share antigenicity with penicillin compounds.

CONTRAINDICATIONS: History of prior hypersensitivity to lincomycin or clindamycin. Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: *CASES OF SEVERE AND PERSISTENT DIARRHEA HAVE BEEN REPORTED AND HAVE AT TIMES NECESSITATED DISCONTINUANCE OF THE DRUG. THIS DIARRHEA HAS BEEN OCCASIONALLY ASSOCIATED WITH BLOOD AND MUCUS IN THE STOOLS AND HAS AT TIMES RESULTED IN AN ACUTE COLITIS. THIS SIDE EFFECT USUALLY HAS BEEN ASSOCIATED WITH THE ORAL DOSAGE FORM BUT OCCASIONALLY HAS BEEN REPORTED FOLLOWING PARENTERAL THERAPY.* A careful inquiry should be made concerning previous sensitivities to drugs or other allergens. Safety for use in pregnancy has not been established and Lincocin (lincomycin hydrochloride) is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infections for 10 days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihistamines available for emergency treatment. *Skin and mucous membranes*—Skin rashes urticaria, vaginitis, and rare instances of exfoliative and vesiculobullous dermatitis have been reported. *Liver*—Although no direct relationship to liver dysfunction is established, jaundice and abnormal liver function tests (particularly serum transaminase) have been observed in a few instances. *Cardiovascular*—Instances of hypotension following parenteral administration have been reported, particularly after too rapid IV administration. Rare instances of cardiopulmonary arrest have been reported after too rapid IV administration. If 4.0 grams or more administered IV, dilute in 500 ml of fluid and administer no faster than 100 ml per hour. *Special senses*—Tinnitus and vertigo have been reported occasionally. *Local reactions*—Excellent local tolerance demonstrated to intramuscularly administered Lincocin (lincomycin hydrochloride). Reports of pain following injection have been infrequent. Intravenous administration of Lincocin in 250 to 500 ml of 5% glucose in distilled water or normal saline has produced no local irritation or phlebitis.

HOW SUPPLIED: *250 mg* and *500 mg* Capsules—bottles of 24 and 100. *Sterile Solution, 300 mg per ml*—2 and 10 ml vials and 2 ml syringe. *Syrup, 250 mg per 5 m*—60 ml and pint bottles.

For additional product information, consult the package insert or see your Upjohn representative.

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THYROID-FUNCTION TESTS ARE USEFUL IN MONITORING SYNTHROID® (sodium levothyroxine) THERAPY

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- No calculations are needed, test interpretation is simple
- P.B.I., T_4 by Column, Murphy-Pattee, Free Thyroxine are all useful in monitoring patients on T_4 because they *all* measure T_4
- SYNTHROID patients are thereby easy to monitor because their test results will fall within predictable, elevated test ranges
- Of course, clinical assessment is the best criterion of the thyroid status of the drug-treated patient

TEST	HYPOTHYROID	SYNTHROID THERAPEUTIC NORMAL
P.B.I.	Less than 4 mcg %	6-10 mcg %
T_4 By Column	Less than 3 mcg %	7-9 mcg %
T_3 (Resin)	Less than 25%	27-35%
T_3 (Red Cell)	Less than 11%	11.5-18%
Free Thyroxine	Less than 0.7 nanograms %	0.7-2.5 nanograms %
Murphy-Pattee	Less than 2.9 mcg %	4-11 mcg %

Synthroid®
(sodium levothyroxine)

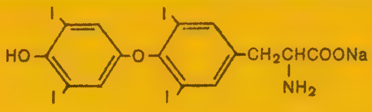
Choose the Smooth Road ...to thyroid replacement therapy

See reverse side for Prescribing Information.

Synthroid® (sodium levothyroxine)

brand of **Sodium Levothyroxine, U.S.P.** • **Synthroid Tablets**—for oral administration • **Synthroid for Injection**—for parenteral administration

SYNTHROID **Tablets** and SYNTHROID **for Injection** contain synthetic crystalline sodium levothyroxine. L-thyroxine is the metabolically active isomer secreted by the thyroid gland and is approximately twice as active as the racemic (DL-) form. For purposes of comparison, 0.1 mg. of SYNTHROID (sodium levothyroxine) elicits a clinical response approximately equal to that produced by one grain (65 mg.) of desiccated Thyroid, U.S.P. SYNTHROID (sodium levothyroxine) simulates endogenous thyroxine in its gradual, sustained effect—an important consideration from the standpoint of maintenance—and in its high specificity for serum-thyroxine-binding protein. In contrast to desiccated thyroid and thyroglobulin, each dose of SYNTHROID (sodium levothyroxine) is uniform in hormone content, thus avoiding fluctuation in biologic potency and consequent treatment problems. SYNTHROID (sodium levothyroxine) permits maximal toleration because of its complete freedom from potentially allergenic protein substances.



Sodium Levothyroxine

Pharmacology: SYNTHROID (sodium levothyroxine) acts, as does endogenous thyroxine, to stimulate metabolism, growth, development and differentiation of tissues. It increases the rate of energy exchange, and increases the maturation rate of the epiphyses. Sodium levothyroxine is absorbed rapidly from the gastrointestinal tract after oral administration; following absorption, the compound becomes bound to the serum alpha globulin fraction. Accurate determination of either the PBI (protein-bound-iodine) or other appropriate tests may serve as a useful index of therapeutic response to SYNTHROID (sodium levothyroxine) therapy because of its affinity for serum proteins. The mean half-time of levothyroxine turnover is reported to be 6.5 days as measured by disappearance of radio-iodine (I^{131}) labeled levothyroxine from the serum in euthyroid subjects.

Indications: SYNTHROID (sodium levothyroxine) is specific replacement therapy for diminished or absent thyroid function resulting from primary or secondary atrophy of the gland, congenital defect, surgery, excessive radiation, or anti-thyroid drugs. Indications for SYNTHROID (sodium levothyroxine) **Tablets** include myxedema, hypothyroidism without myxedema, hypothyroidism in pregnancy, pediatric and geriatric hypothyroidism, hypopituitary hypothyroidism, simple (non-toxic) goiter, and reproductive disorders associated with hypothyroidism. SYNTHROID (sodium levothyroxine) **for Injection** is indicated for intravenous use in myxedematous coma and other thyroid dysfunctions where rapid replacement of the hormone is required. The injection is also indicated for intramuscular use in cases where the oral route is suspect or contraindicated due to existing conditions or to absorption defects, and when a rapid onset of effect is not desired.

Precautions: As with other thyroid preparations, an overdosage of SYNTHROID (sodium levothyroxine) may cause diarrhea or cramps, nervousness, tremors, tachycardia, vomiting, and continued weight loss. While these effects may begin after four to five days, they may not become apparent for one to three weeks. Patients receiving the drug should therefore be kept under close observation for signs of thyrotoxicosis. If indications of overdosage appear, the medication should be discontinued for two to six days and then resumed at a lower level. Signs of optimal thyroid function will establish the proper maintenance dose.

The severity of diabetes may be reduced by hypothyroidism, and the requirement for insulin is often lowered. Therefore, patients with diabetes mellitus should be observed closely for possible changes in insulin or other antidiabetic drug dosage requirements.

If hypothyroidism is accompanied by adrenal insufficiency, such as Addison's disease (chronic adrenocortical insufficiency), Simmond's disease (panhypopituitarism), or Cushing's syndrome (hyperadrenalism), these dysfunctions must be corrected prior to and during SYNTHROID (sodium levothyroxine) administration. The patient's progress during thyroid treatment must be observed carefully and regularly for evidence of the development of any of these conditions.

Caution must be exercised in the administration of this drug to patients with cardiovascular disease; development of chest pains or other aggravation of the cardiovascular disease requires a reduction of dosage.

Contraindications: SYNTHROID (sodium levothyroxine) therapy is contraindicated in thyrotoxicosis and acute myocardial infarction.

Side effects: The effects of SYNTHROID (sodium levothyroxine) therapy are slow in being manifested. Side effects, when they do occur, are secondary to increased rates of body metabolism: sweating, heart palpitations with or without pain, leg cramps, and weight loss. Diarrhea, vomiting, and nervousness have also been observed. Myxedematous patients with heart disease have died from abrupt increases in dosage of thyroid drugs. Careful observation of the patient during the beginning of any thyroid therapy will alert the physician to any untoward effects.

In most cases with side effects, a reduction in dosage followed by a more gradual adjustment upward will result in a more accurate indication of the patient's dosage requirements without the appearance of side effects.

Dosage and administration: The importance of careful diagnosis of hypothyroidism must always be considered, despite the fact that symptomatically the condition is one of the most clear-cut of endocrine disorders. Diagnosis should include laboratory testing of basal metabolic rate, serum PBI, and other tests for thyroid function to support clinical signs of thyroid hypofunction.

Treatment of hypothyroidism requires replacement of thyroid hormone in daily amounts adequate for maintaining normal metabolism. Reliable laboratory measurements and good clinical judgment will determine the daily dose required to achieve the goal of therapy. The correct concentration of thyroxine is essential for the health of all tissues; overdosage may lead to thyrotoxicosis medicamentosa, while underdosage permits the continuation of the hormonal deficiency.

Treatment can be guided by the serum PBI level (the normal range in males is 4.5 to 7.5 mcg%; in females, 5.5 to 8.5 mcg%) produced after a few weeks by the daily dose of thyroxine administered. A PBI level below 5 mcg% may indicate the need for a larger dose of thyroxine. PBI levels are not absolute indicators of the thyroid state, however. In patients made euthyroid with SYNTHROID (sodium levothyroxine), it is not unusual to find PBI levels of 8 to 10 mcg%. Levothyroxine has a high binding capacity for serum proteins in contrast to other thyroid medicaments which may contain varying amounts of L-triiodothyronine which has a low binding capacity.

In adult myxedema (when the PBI is often as low as 2.5 mcg% or less), the starting dose of SYNTHROID (sodium levothyroxine) should be 0.025 mg. daily, increased to 0.05 mg. after two weeks and to 0.1 mg. at the end of a second two weeks. A serum PBI, ECG, and clinical examination should be made after 30 days on this dosage regimen. In the event of an over-all rapid recovery, the 0.1 mg. daily dose should be continued, and the clinical status reviewed after an additional 30 days (total treatment period of approximately 90 days). The daily dose may then be increased to 0.2 mg. After an additional two months on this regimen, clinical and PBI evaluations should be repeated. If either appears to be below normal, the daily dose should be increased to 0.3 mg. Permanent maintenance doses vary with the individual patient, ranging from 0.1 to 1.0 mg. daily.

The same starting dose of SYNTHROID (sodium levothyroxine) as administered for adult myxedema may be employed for cretinism or severe hypothyroidism in children, but all intervals of change should be made every two weeks. In the growing child, final dosage requirements may be greater than in the adult. In cases where cretinism is discovered after the first six weeks of life, overdosage of SYNTHROID (sodium levothyroxine) therapy is much preferred to under-treatment, in order to accelerate growth rate. As with the adult patient, serum PBI may be measured during SYNTHROID (sodium levothyroxine) administration.

In hypothyroidism without myxedema (where the PBI usually ranges from 2.5 to 4.5 mcg%), the starting dose of SYNTHROID (sodium levothyroxine) may be 0.1 mg. daily and may be increased by 0.1 mg. every 30 days. Clinical evaluation should be made monthly and PBI measurements about every 90 days. Final maintenance dosage will usually range from 0.2 to 0.4 mg. daily, although higher maintenance dosages are sometimes necessary.

In myxedematous stupor or coma, with no evidence of severe heart disease, 200 to 400 mcg. of SYNTHROID (sodium levothyroxine) **for Injection** may be administered intravenously utilizing a solution containing 100 mcg. per ml. Detectable effects are usually observed by the sixth hour after injection and are fully appreciated during the following day. A repeat injection of 100 to 200 mcg. may be given on the second day if significant improvement has not occurred. The intravenous use of sodium levothyroxine in myxedematous coma is advantageous because it produces a predictable increase in the concentration of protein-bound iodine, eliminates the need for multiple doses until oral therapy is reinstated, circumvents the uncertainty of oral or intramuscular absorption, and avoids the risk of pulmonary aspiration. SYNTHROID (sodium levothyroxine) **for Injection** is given by the intramuscular route when the oral route is impractical and a rapid onset of effect is not desired.

It should be noted that in some patients whose PBI is 4.0 mcg% or less, endogenous secretion is reduced when exogenous thyroid hormone is administered. In these patients, the PBI does not increase as would be expected after a few weeks of medication. This may indicate the need for a longer period of observation to ascertain the required dosage. In such patients, several months may be needed to determine the correct maintenance dosage.

How supplied: SYNTHROID (sodium levothyroxine) **Tablets** are supplied as scored, color-coded compressed tablets in seven concentrations: 0.025 mg. (orange), 0.05 mg. (white), 0.1 mg. (yellow), 0.15 mg. (violet), 0.2 mg. (pink), 0.3 mg. (green), and 0.5 mg. (blue).

SYNTHROID (sodium levothyroxine) **for Injection** is supplied in 10 ml. vials containing 500 mcg. of lyophilized active ingredient and 10 mg. of Mannitol, N.F.; a 5 ml. vial containing Sodium Chloride Injection, U.S.P., is provided as diluent.

Directions for reconstitution: Reconstitute the lyophilized sodium levothyroxine by aseptically adding 5 ml. of the Sodium Chloride Injection, U.S.P., to the vial. Shake vial to insure complete mixing.

Use immediately after reconstitution. Discard any unused portion.

References: 1. Bongiovanni, A. M. The use and misuse of thyroid hormone in pediatric practice. Pediatrics **33:** 585-6, 1964.
2. Holvey, D. N., Goodner, C. J., Nicoloff, J. T., and Dowling, J. T. Treatment of myxedema coma with intravenous thyroxine. Arch. Internal Med. **113:** 89-96, 1964.
3. Macgregor, A. G. Why does everybody use thyroid B.P.? Lancet **1:** 329-32, 1961.
4. Rawson, R. W. Physiologic effects of thyroxine in man. Mayo Clin. Proc. **39:** 637-53, 1964.
5. Runyan, J. W. Hypothyroidism and myxedema. J. Tenn. St. Med. Assoc. **56:** 391-4, 1963.
6. Starr, P. Current concepts in the management of thyroid disease. Chicago Med. Soc. Bull. **61,** no. 6: 93-6, 1958.
7. Starr, P. Subclinical hypothyroidism—recognition and treatment. Calif. Med. **97:** 263-7, 1962.
8. Sterling, K. Thyroxine in blood. Mayo Clin. Proc. **39:** 586-608, 1964.
9. Sturnick, M. I. and Lesses, M. F. A comparison of the effect of desiccated thyroid and sodium levothyroxine on the serum protein-bound iodine. New Engl. J. Med. **264:** 608-9, 1961.
10. Wiswell, J. G. The diagnosis and treatment of primary and secondary hypothyroidism. J. Chronic Dis. **14:** 544-57, 1961.
11. Means, J. H., DeGroot, L. J., and Stanbury, J. B. Thyroid and its Diseases, 3rd ed. New York, McGraw-Hill, 1963.
12. Dowling, J. T. Hypothyroidism in: Conn, H. F., Ed., Current Therapy 1964. Philadelphia, Saunders, 1964, pp. 345-347.
13. Gargill, S. L. and Lesses, M. F. Diseases of the Thyroid Gland. New York, Oxford University Press, 1955.
14. Trotter, W. R. Diseases of the Thyroid. Philadelphia, Davis, 1962.

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Report from the Planning and Priorities Committee

By Stuart M. Gould, Jr., MD
Chairman, MSMS Committee on
Planning and Priorities

Editor's Note: Following are excerpts from the special report given by the chairman of the MSMS Planning and Priorities Committee to The MSMS Council Aug. 5. The long report contained many background papers and diagrams, and will be discussed at the fall councilor conferences across the state.

The MSMS Planning and Priorities Committee, which received from the 1972 spring House of Delegates meeting the report of the Alexander Grant Company (Phase II) to study, will present a progress report to the 1972 fall house, and a final report in the spring or fall of 1973.

The committee anticipates making a progress report to the Council and to the house of delegates this fall to describe our work, and approach. We are going to follow the instructions of the spring house of delegates to take these ideas for change to the membership, hospital staffs, non-members, county medical societies, the AMA, the Council of Medical Specialties, and others.

We will consider these presentations as "hearings" where we will throw out ideas and serve as a listening post.

The committee anticipates that it cannot be ready with a final report probably until the fall of 1973 but it is possible that the March meeting of the House of Delegates in 1973 could or should be the target date.

The MSMS Committee includes two members of the Wayne County committee named to study the Alexander Grant Report. We are pleased that they serve in this liaison role and that they are in effect members of our state-wide committee. The MSMS committee includes doctors from Wayne, Oakland, Washtenaw, Ingham, Genesee, Muskegon, Bay, St. Clair, Kent, and Newaygo.

The committee has been meeting regularly in Detroit and at the MSMS Headquarters and has studied the Alexander Grant report of member comments about benefits and activities; has begun a review of MSMS committee purposes and activities, and has been assigned to study the proper role of MSMS in continuing education in addition to the matter of MSMS structure.

* * *

FOLLOWING ARE THE current objectives of the committee:

1. The committee will study Phase II, The Physician Attitude Survey. This will give us insight into what the physicians believe should be the ranking MSMS priorities.
2. The Phase II Study will also bear review by the committee since it comments on the restructuring of MSMS based on the company's interpretation of attitudes in the survey.

As the Committee began its study of MSMS structure, it was decided to not only consider the structural changes advocated by Alexander Grant but also organizational ideas from Committee members.

We decided we couldn't deal with reorganization in the abstract. We could act more intelligently if we could react to proposals or alternatives to the organizational model proposed in the Grant study. It was agreed to instruct the staff to develop alternative exercises on organizational structure to give alternatives for the committee to evaluate. So at our June meeting, the MSMS staff did a fine

(Continued on Page 812)

The MSMS Ski Club is planning a trip to Aspen, Colo., March 10-17, 1973. The trip will include a charter flight from Detroit to Grand Junction, bus to Aspen, lodging at the Continental Inn, breakfast and lift tickets for $325 per person. First come . . . first served. Those interested, please contact Thomas Berglund, MD, at MSMS Headquarters, Box 950, East Lansing, 48823.

MSMS co-sponsoring drug, alcohol meeting Sept. 19-20

Gov. William G. Milliken is a keynote speaker for the two-day workshop on drug and alcohol abuse to be staged Sept. 19-20 at Kellogg Center, Michigan State University, East Lansing.

Another keynote speaker for the workshop, which is co-sponsored by MSMS and the Governor's Office of Drug Abuse and Alcoholism, is Richard C. Bates, MD, Lansing, chairman of the MSMS Committee on Alcohol and Drug Dependency and director of the alcoholism treatment center at E. W. Sparrow Hospital, Lansing.

Focus of the program will be an exchange of information. Through a series of informal sessions, discussion leaders will tell about successful community efforts in four areas: prevention and education, community coordination, detection and recruitment, and treatment.

MSMS involvement has grown out of requests by Michigan physicians for help in community problems, particularly drug abuse. Invitations have been mailed to 110 doctors named by their county medical societies as particularly interested.

Workshop sponsors include the Michigan Association of School Boards, Michigan Hospital Association, Michigan Nurses Association, Michigan Municipal League, Michigan Press Association, Michigan Sheriffs' Association, Michigan United Auto Workers, Michigan Council on Crime and Delinquency, Michigan Department of Public Health, Alcoholism and Control Program, State Bar of Michigan, Michigan State Police, Michigan District of Kiwanis International, Michigan County Social Services Association, Michigan High School Athletic Association, Michigan State Chamber of Commerce, Michigan Health Council and the National Council on Alcoholism.

PLANNING AND PRIORITIES/continued

job of reducing three exercises to simple forms so that they could be compared and analyzed as to their merits and demerits.

(Note: Copies of three organization models were distributed to The Council August 5 and will be explained at the fall "hearings.")

When the committee reviewed the organizational exercises, the members were impressed with the fact that there were an almost infinite number of combinations of organizational ideas. The committee agreed that there should not be change simply for change's sake. Committee members also felt there were probably some very basic points that needed to be given serious consideration and other organizational changes that needed little consideration.

IN SEPTEMBER, THE Planning and Priorities Committee will meet again to review additional exercises that are developed according to my comments today and begin planning for its hearings. I must report that the committee is a diverse group of people who have accepted this challenge with a great deal of interest and fervor. Each is really dedicated to improving MSMS where improvement seems desirable.

One of the things that we hope will come out of our deliberations will be suggestion for the proper role of MSMS in society and in organized medicine, and perhaps some suggestions about the functions and responsibilities of component societies also. To the extent that there is overlap of concern and responsibilities and duplication of effort, probably these ought to be reviewed and eliminated where possible.

In the coming years and months, MSMS will need all of our resources and our energies to be directed toward the principal problems facing physicians.

THE MEMBERS OF the MSMS Committee on Planning and Priorities include Stuart M. Gould, Jr., MD, Chairman, M. C. Burton, Jr., MD, James B. Blodgett, MD, Norman Bolton, MD, Ned I. Chalat, MD, John C. Coury, MD, Richard R. Galpin, MD, Alfred Golden, MD, Ralph S. Green, MD, D. Bonta Hiscoe, MD, Francis A. Martin, MD, Brooker L. Masters, MD, Richard J. McMurray, MD, Marjorie Peebles-Meyers, MD, Frank L. Pettinga, MD, Robert C. Prophater, MD, Maurice S. Reizen, MD, Randall S. Riggs, WSU Medical Student, Frank B. Walker, II, MD, John R. Wilson, MD, and John R. Ylvisaker, MD.

MSMS contacts all interns, residents about group insurance

A promotional brochure will be mailed this month to all residents and interns in the state, offering them enrollment in the MSMS Group Disability Insurance Program. To participate in the program, the interns and residents must become associate members in MSMS.

The mailing of detailed information on the program will be done by Ben Stratton Insurance Agency of Lansing, which handles the MSMS program.

At its March 19 meeting, The MSMS Council approved extending the insurance program to interns and residents who would become associate members. However, MSMS and the Stratton agency have delayed letters to the individual young doctors until Michigan hospitals could meet their July deadlines to complete house staff rosters.

Porsche Audi: a division of Volkswagen

7cars for 7 brothers.

Wyatt paints Mother Nature. To carry his paints and canvases around with him, he needed a car with a large trunk. The Audi has the same amount of trunk space as the Lincoln Continental Mark IV. This amazed Wyatt since the Audi is much shorter than the Lincoln.

Bernard has a problem. Not only doesn't he take care of himself (a button missing here, a cuff link lost there), he doesn't take care of his car either. No wonder he wanted a car that gets the expert service of a Volkswagen. The Audi does because it's part of the VW organization. (Now if we could only get Bernard to take care of himself.)

Since Edgar has a big family (a boy, a girl, a wife, and a mother-in-law who likes to go for rides), he needed a car with lots of room. The Audi has just about the same headroom and legroom as the Rolls-Royce Silver Shadow. (Edgar sees a lot more of his mother-in-law now.)

Rolf is a first-class skier. He gets to where he's going because the Audi, like the Cadillac Eldorado, has front-wheel drive to give him the traction he needs to get through the snow to the snow.

Fishing, camping and taming the rapids are Duke's way of life. He wanted a car that could handle mountain roads and get him up to his cabin comfortably. Because the Audi has independent front suspension like the Aston Martin, Duke gets peace of mind as well as peace of body.

Meet Geoffrey the banker. To impress his associates, he wanted a car with a plush interior. Since the Audi's interior bears such an uncanny resemblance to that of the Mercedes-Benz 280SE, Geoffrey is now a Senior Vice-President.

Nothing pleases Lance more than pleasing women. He knows the fuss they make over racing car drivers. He also knows the Audi has the same type of steering system as the racing Ferrari. (Ursula is now in seventh heaven.)

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Michigan mediscene

Sept. 19-20—Michigan Conference on Drug Abuse and Alcoholism, sponsored by MSMS and Governor's Office of Drug Abuse and Alcoholism, Kellogg Center, contact: Helen Schulte, MSMS Headquarters

Sept. 16-17—Leadership Training Seminar, State of Michigan Medical Assistants, Hospitality Inn, Lansing, contact: Dorothy Brandis, 401 W. Greenlawn, Lansing, 48910

Sept. 17—Board meeting, Michigan Academy of Family Physicians, MSMS Headquarters, 2 p.m., contact: Mrs. Rita Feldkamp, executive secretary, 933 Wing St., Plymouth, 48170

Sept. 20—Council of Specialty Societies, 2 p.m., MSMS Headquarters, contact: Glenn E. Moore, MD, chairman, 323 W. Second, Flint, 48503

Sept. 21-24—Michigan Regional Meeting, American College of Physicians and Michigan Society of Internal Medicine, Otsego Ski Club, Gaylord, contact: Muir Clapper, MD, ACP governor for Michigan, Wayne State University School of Medicine, 540 E. Canfield, Detroit, 48201

Sept. 27—Joint Practice Commission of the Michigan Nurses Association and MSMS, MSMS Headquarters, 4 p.m., contact: Joan Guy, executive secretary, Michigan Nurses Association, 120 Spartan Ave., East Lansing, 48823

Sept. 28-29—Upper Peninsula Annual Public Health Meeting, Escanaba, contact: Delta-Menominee District Health Department, Delta County Building, Escanaba, 49829

Oct. 1 and 4—MSMS Council, Sheraton-Cadillac Hotel, Detroit, contact: Warren F. Tryloff, MSMS director

Oct. 1-5—107th Annual Session of the Michigan State Medical Society, Sheraton-Cadillac Hotel, Detroit, contact: Helen Schulte, MSMS Headquarters, for scientific meeting information, and Richard Campau, MSMS Headquarters, for House of Delegates meeting information

Oct. 5—Annual Meeting, Michigan Division, American Cancer Society, Olds Plaza Hotel, Lansing, contact: Arthur L. Crampton, executive vice president, 1205 E. Saginaw St., Lansing, 48906

Oct. 25—Family Practice Day, sponsored by the Michigan Academy of Family Physicians, Grosse Pointe War Memorial, 32 Lake Shore Road, Grosse Pointe Farms, contact: Mrs. Rita Feldkamp, MAFP executive secretary, 933 Wing St., Plymouth, 48170

Nov. 8—The Council, special meeting, noon, MSMS Headquarters, contact: Warren F. Tryloff, director

Nov. 9-10—MSMS Conference on the Physician and Environmental Quality Control, Hilton Inn, Detroit Metropolitan Airport, contact: Helen Schulte, MSMS Headquarters

Nov. 9-10—Third Annual Cardiology Symposium, "Cardiology for the Practitioner," Borgess Hospital, Kalamazoo, contact: Roberto Barcala, MD, 1521 Gull Road, Kalamazoo, 49001

Dec. 6—The Council, MSMS Headquarters, contact: Warren F. Tryloff, MSMS director

Feb. 26-March 2—Clinical gastroenterology, postgraduate course sponsored by the American College of Physicians, Towsley Center, University of Michigan Medical Center, Ann Arbor, contact: H. M. Pollard, MD, 2012 Vinewood Blvd., Ann Arbor, 48104

March 21-22—Annual Michigan Conference on Maternal and Perinatal Health, Olds Plaza Hotel, Lansing, contact: Helen Schulte, MSMS Headquarters

June 18-22—Clinical aspects of blood transfusion, postgraduate course sponsored by the American College of Physicians, Kellogg Center, Michigan State University, contact: Scott N. Swisher, MD, Department of Medicine, MSU College of Human Medicine, East Lansing, 48823

Zip code 48823

To the editor:

I have been looking over the June issue of the journal and I was very much impressed with the synopsis of the April 26, 1972 MSMS Council Highlights which appeared on page 569. The thing I liked about this particular page is that it is brief enough that a person can take time easily to read it, and the manner in which it is presented is very much to the point with information that the doctors need to know about. (I might add that it is helpful to your field man as well.)

While I am at it, I also appreciated the report on Phase II recommendations and the evaluation of the MSMS PR program in light of those recommendations.

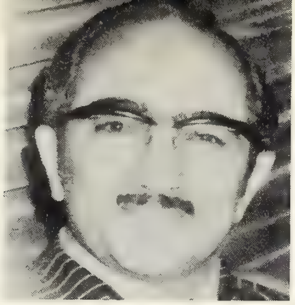
Very well done!

As usual, I find your journal very much worth reading.

Sincerely,
James S. Imboden
Assistant director,
AMA Field Service Department

P.S. I thought another excellent article was the write-up on the Ingham doctors taking the initiative to meet and talk with their legislators.

Doctor Nickhah takes medical charge of Iran's Olympic team



Doctor Nickhah

By Judith Marr
Managing Editor

In the 1968 Olympic games in Mexico City, an Iranian wrestler, a three-time gold medal winner, suffered a coronary in his first match.

Also at those games, another Iranian wrestler determined to compete though he had broken a metacarpal two days earlier. He successfully pinned three men, then was met by an adversary who knew of the break, unmercifully twisted the wrestler's hand, and pinned him.

In each case, the wrestler's attending physician was Fazlolah Nickhah, MD, Ypsilanti surgeon, who is just returned from the Munich summer games and his third trip to an Olympiad.

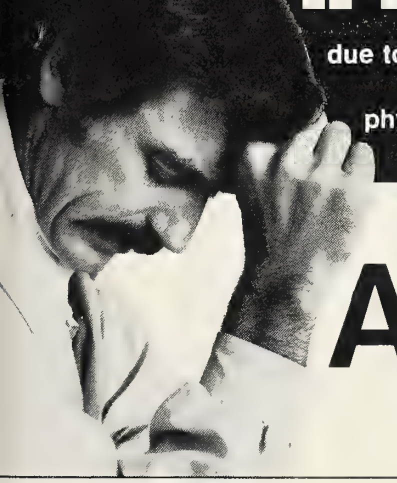
Editor's Note: This article was prepared before the international incident at the Munich Olympic games, in which 11 Israeli competitors were shot to death. Thus, some of Doctor Nickhah's statements seem anachronistic. Yet they take on deeper meaning in the light of the tragedy.

In 1952, Doctor Nickhah was himself an Olympic competitor for his homeland as a bantamweight boxer. Since then he has served as Iranian team physician in international wrestling and weightlifting tournaments, in the Sixth Asian Games in Bangkok in 1970 and the 1968 Mexico City Olympics.

Doctor Nickhah was named team physician again this year by Dr. M. H. Rahnavardi, Secretary General of the Iranian National Olympic Committee, serving under King Mohamad Reza Pahlavi, better known in America as the Shah of Iran.

Young Fazlolah was well-known as a boxer in his native land, where he was undefeated and a five-year champion at his weight. He won his title first at the age of 15 and was presented with a gold medal by the Shah.

But after failing to earn an Olympic medal for his country, the champion stepped down to concentrate on his studies. He earned his MD from the University of Tehran, at the same time becoming



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T. Jakobovits
Fertility and Sterility, January 1970
Official Journal of the American Fertility Society

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Contraindications: Android is contraindicated in patients with prostatic carcinoma, severe cardiorenal disease and severe persistent hypercalcemia, coronary heart disease and hyperthyroidism. Occasional cases of jaundice with plugging biliary canaliculi have occurred with average doses of Methyl Testosterone. Thyroid is not to be used in heart disease and hypertension.

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Precautions: If hypothyroidism is accompanied by adrenal insufficiency the latter must be corrected prior to and during thyroid administration.

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References: 1. **Montesano, P., and Evangelista, I.** Methyltestosterone-thyroid treatment of sexual impotence. Clin Med 12:69, 1966. 2. **Dublin, M. F.** Treatment of impotence with methyltestosterone-thyroid compound. West Med 5:67, 1964. 3. **Titeff, A. S.** Methyltestosterone-thyroid in treating impotence. Gen Prac 25:6, 1962. 4. **Hellman, L., Bradlow, H. L., Zumoff, B., Fukushima, D. K., and Gallagher, T. F.** Thyroid-androgen interrelations and the hypocholesteremic effect of androsterone. J Clin Endocr 19:936, 1959. 5. **Farris, E. J., and Colton, S. W.** Effects of L-thyroxine and liothyronine on spermatogenesis. J Urol 79:863, 1958. 6. **Osol, A., and Farrar, G. E.** United States Dispensatory (ed. 25). Lippincott, Philadelphia, 1955, p. 1432. 7. **Wershub, L. P.** Sexual Impotence in the Male. Thomas, Springfield, Ill., 1959, pp. 79-99.

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secretary of the Sports Medicine Federation of Iran and a member of the country's boxing federation. Through these associations, he was able to keep in touch, and he credits this as the reason he was asked to serve as team physician for the Olympics.

Doctor Nickhah, whose father was a colonel and grandfather was a general in the Persian army and physician to the king, told the Ypsilanti *Press* recently that "The greatest enjoyment I have in my life is being affiliated with athletics."

At the Munich Olympics these past weeks, he supervised the 60-man Iran Olympic team in their training sessions and competitions and took charge of any emergency medical situations, dividing the duties with a second physician from Iran.

"Of course, the Olympic committee has complete medical facilities and physicians available," he comments, "but the primary responsibility for the athletes lies with the team physicians."

One of his major duties was to supervise weight reduction of wrestlers, weightlifters and boxers.

"Some of them really don't know what to do and sit in the sauna dehydrating and depleting themselves of salts," he says.

But fifty percent of his athletes' ailments are psychosomatic, he says.

"The athletes, even though they are in top shape, still feel dizzy and weak, have headaches, ask about shoulders and legs that hurt."

And there are other problems such as gastroenteritis and food poisoning, torn knee cartilage, muscle strains, lacerations, contusions, and a variety of unexpected happenings.

"People say, 'oh, you're so lucky to be going to the Olympics,'" he comments. "But it's not really so much fun. We're so busy we hardly can see any games but the ones we're supervising. We have to watch the competition on TV just like anyone in the U.S."

Doctor Nickhah competed on a four-time state champion soccer team in Iran while in high school, at the same time earning the highest score in comprehensive final exams in his 200-member class. He placed second in downhill speed racing and third in slalom skiing for the University of Tehran and is presently a member of the U.S. and American Medical Ski Associations.

He also belongs to the Medical Committee of the Asian Football Confederation and the Medical Committee of the International Wrestling Federation.

He stays in shape now by running and exercising daily and placed third in the 1971 two-mile run of the American Medical Joggers Association in Boston.

"The Olympic environment is like the promised land," he told the Ypsilanti paper. "It's like a land we all dream of where brotherhood and love seem to be the rule, uniting these thousands of people from differing backgrounds and ideals all sharing in Olympic excellence.

"I wish the world could revolve around sports competition instead of politics; we'd all be much better for it."

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Several months ago, at one of the MSMS component medical society meetings, everyone present became interested in a medical court case against one of the doctors at the meeting.

Herb Auer, manager, MSMS Communications Department, was there that night on a field visitation. A former newspaper reporter and desk man, Herb knew the story would interest all doctors. He assigned C. R. Shelton, an experienced Detroit medical communications man, to freelance an article for Michigan Medicine.

To compile his report, Mr. Shelton spent a morning with the plaintiff's lawyer, read the plaintiff's and defendants' briefs and the state's findings on the fact of the law, consulted with MSMS and defendant's lawyers, one of the defendants and the hospital administrator. Then he sent the article for review by MSMS Legal Counsel A. Stewart Kerr, who fired it in to Michigan Medicine *as "well done."*

Following is the article:

Watch for results of this important lawsuit now before appeals court

By C. R. Shelton
Detroit free-lance writer

A lawsuit which may prove to have far-reaching effects on physician-hospital relationships is now under notice of appeal in the Michigan Court of Appeals.

This case stemmed from a civil action for damages and injunctive relief heard in the Circuit Court of the County of Wayne.

The appeal is based on the contention that the trial court erred in matters of law in a number of areas, particularly in what is adequate due process.

The plaintiff is a licensed physician, who prior to his demotion, suspension and subsequent dismissal, served on the staff of a Detroit-area private hospital.

His claims were, in part, that he was denied due process; that he had a certain contractual pledge agreement with the hospital—the terms of which were that in consideration of his promise to pay

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the hospital three thousand dollars, he was promoted to and would remain on active staff status; and that the five individual defendants (also licensed physicians) conspired against him in furtherance of a plan to exclude competition from the hospital and for their own personal and economic motives with the intent and effect of interfering with his advantageous business relationships.

The defendants countered that the plaintiff had been demoted, suspended and dismissed because of deficiencies in medical record keeping, non-attendance at staff meetings, plus deficiencies in patient care; he had failed to exhaust his administrative remedies; he was not denied substantive or procedural due process; the hospital is private, controlled by a privately elected board of trustees, which in its discretion may grant or deny hospital privileges to licensed physicians; the actions of the five physicians—members of the hospital's Credentials and Professional Standards Committee—do not constitute an attempt to establish and maintain a monopoly of the medical profession; and that the plaintiff is not entitled to be reinstated by reason of his pledge.

Following a five-week trial, the Circuit Court ruled:

1. Pledge which plaintiff made to defendant hospital does not constitute a contractual agreement with it;

2. Plaintiff had no contractual right to staff membership of the defendant hospital because of his pledge;

3. Defendant hospital had no contractual obligation to renew plaintiff's status as a member of the medical staff.

4. Plaintiff's claim of damages for breach of contract is without merit, and the defendant hospital is not liable to plaintiff for any damages;

5. Plaintiff need not have exhausted his administrative remedies prior to seeking judicial relief because it would have been futile.

6. Defendant hospital is a private non-profit hospital controlled by a privately elected board of trustees.

7. Substantial federal monies received by a private hospital from the Hill-Harris Fund entail, in return obligations of observance of federal constitutional mandates.

8. Due process standards governing the granting or denying of hospital staff privileges to licensed physicians in public hospitals apply to private hospitals which have received federal funds under the Hill-Harris program.

9. Plaintiff was provided with a hearing before the Credentials and Professional Standards Committee and received substantial and procedural due process in connection with such hearing. Plaintiff received proper notice of the time and place of hearing; a hearing before a properly authorized body; a reasonably definite statement of the charges against him; he had the right to cross examination; the right to produce witnesses in his own behalf; and received a full consideration and a fair determination according to the evidence of the controversy.

10. The individual defendants and hospital did not engage in any illegal conspiracy or monopoly or any other improper activities with the objective or for the purpose of demoting plaintiff to the courtesy staff or suspending plaintiff from defendant hospital.

11. There was no illegal interference with any contractual relationships between plaintiff and his patients and none of the individual defendants or defendant hospital singly or in concert, committed any illegal acts which interfered with or which in any way induced the breach of any contract which might exist between plaintiff and his patients.

12. There was no violation of any fiduciary obligations by the defendant hospital or the individual defendants to the hospital service area or to the plaintiff.

13. The actions and conclusions of the Credentials and Professional Standards and Medical Executive Committees of the medical staff or the defendant hospital, and those of the board of trustees, relating to the plaintiff were in good faith, were not arbitrary or capricious and were without malice.

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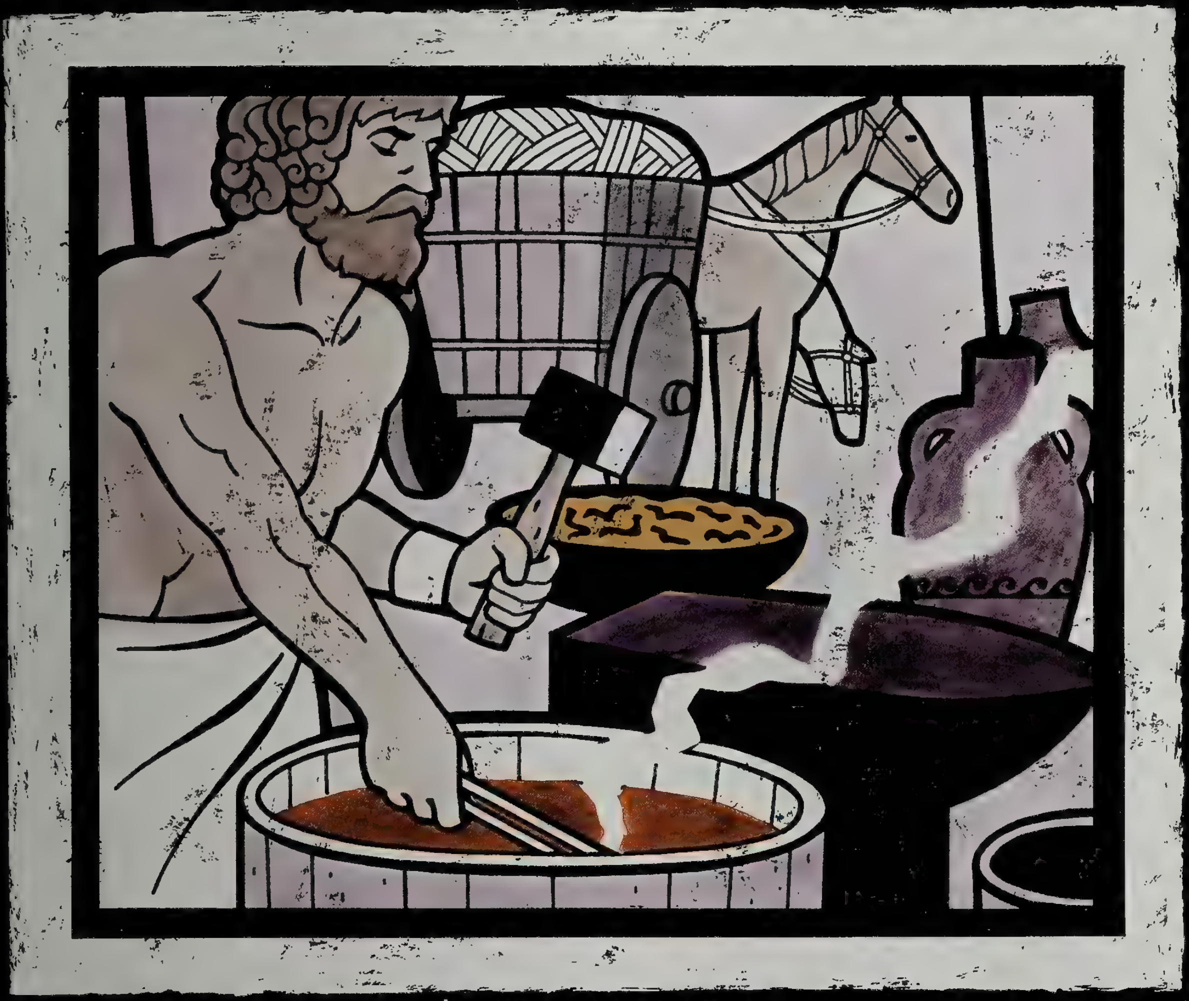
Iron therapy for anemia is almost as old as history itself



Celsus's empirical use of iron

Aulus Cornelius Celsus recommended an unusual form of iron therapy for the treatment of enlarged spleens—the oral administration of water that blacksmiths had used for dousing white-hot iron.

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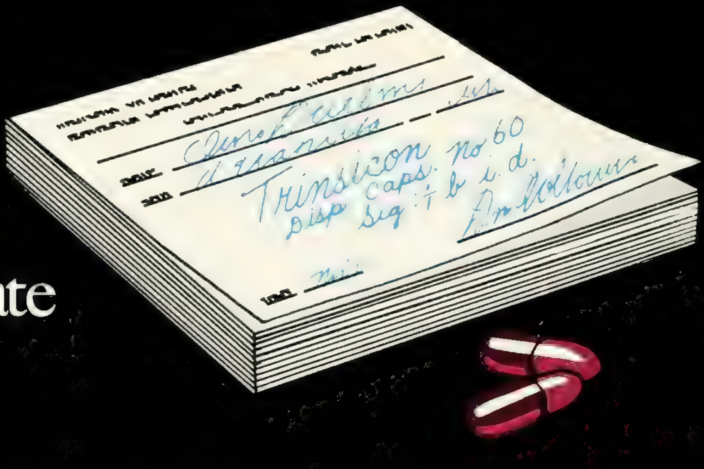
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Description: Each Pulvule® contains—

Special Liver-Stomach Concentrate, Lilly (containing Intrinsic Factor)	240 mg.
Cobalamin Concentrate, N.F., equivalent to Cobalamin	7.5 mcg.
Iron, Elemental (as Ferrous Fumarate)	110 mg.
Ascorbic Acid (Vitamin C)	75 mg.
Folic Acid	0.5 mg.

(The total vitamin B_{12} activity in the Special Liver-Stomach Concentrate, Lilly, and the Cobalamin Concentrate, N.F., is 15 micrograms.)

Indications: Trinsicon is a multifactor preparation effective in the treatment of anemias that respond to oral hematinics, including pernicious anemia and other megaloblastic anemias and also iron-deficiency anemia. Therapeutic quantities of hematopoietic factors that are known to be important are present in the recommended daily dose.

Vitamin B_{12} with Intrinsic Factor—When secretion of intrinsic factor in gastric juice is inadequate or absent (e.g., in Addisonian pernicious anemia or after gastrectomy), vitamin B_{12} in physiological doses is absorbed poorly, if at all. The resulting deficiency of vitamin B_{12} leads to the clinical manifestations of pernicious anemia. Similar megaloblastic anemias may develop in fish tapeworm (*Diphyllobothrium latum*) infection or after a surgically created small-bowel blind loop; in these situations, treatment requires freeing the host of the parasites or bacteria which appear to compete for the available vitamin B_{12}. Strict vegetarianism and malabsorption syndromes may also lead to vitamin B_{12} deficiency. In the latter case, parenteral therapy, or oral therapy with so-called massive doses of vitamin B_{12}, may be necessary for adequate treatment of the patient.

Potency of intrinsic factor concentrates is determined physiologically, i.e., by their use in patients with pernicious anemia. The liver-stomach concentrate with intrinsic factor and the vitamin B_{12} contained in two Pulvules Trinsicon provide 1½ times the minimum amount of therapeutic agent which, when given daily in an uncomplicated case of pernicious anemia, will produce a satisfactory reticulocyte response and relief of anemia and symptoms.

Concentrates of intrinsic factor derived from hog gastric, pyloric, and duodenal mucosa have been used successfully in patients who lack intrinsic factor. For example, Fouts *et al.* maintained patients with pernicious anemia in clinical remission with oral therapy (liver extracts or intrinsic factor concentrate with vitamin B_{12}) for as long as twenty-nine years.

After total gastrectomy, Ficarra found multifactor preparations taken orally to be "just as effective in maintaining blood levels as any medication that has to be administered parenterally." His study was based on twenty-four patients who had survived for five years after total gastrectomy for cancer and who had been taking two Pulvules Trinsicon daily.

Folic Acid—Folic acid deficiency is the immediate cause of most, if not all, cases of nutritional megaloblastic anemia and of the megaloblastic anemias of pregnancy and infancy; usually, it is also at least partially responsible for the megaloblastic anemias of malabsorption syndromes, e.g., tropical and nontropical sprue.

It is apparent that in vitamin B_{12} deficiency (e.g., pernicious anemia), lack of this vitamin results in impaired utilization of folic acid. There are other evidences of the close folic acid-vitamin B_{12} interrelationship: (1) B_{12} influences the storage, absorption, and utilization of folic acid, and (2), as a deficiency of B_{12} progresses, the requirement for folic acid increases. However, folic acid does not change the requirement for vitamin B_{12}.

Iron—A very common anemia is that due to iron deficiency. In most cases, the response to iron salts is prompt, safe, and predictable. Within limits, the response is quicker and more certain to large doses of iron than to small doses.

Each Pulvule Trinsicon furnishes 110 mg. of elemental iron (as ferrous fumarate) to provide a maximum response.

Ascorbic Acid—Vitamin C plays a role in anemia therapy. It augments the conversion of folic acid to its active form, folinic acid. In addition, ascorbic acid promotes the reduction of ferric iron in food to the more readily absorbed ferrous form. Severe and prolonged vitamin C deficiency is associated with an anemia which is usually hypochromic but occasionally megaloblastic in type.

Contraindications and Precautions: Anemia is a manifestation that requires appropriate investigation to determine its cause or causes.

Folic acid *alone* is unwarranted in the treatment of pure vitamin-B_{12}-deficiency states, such as pernicious anemia. Indeed, the use of folic acid in large doses in pernicious anemia without adequate vitamin B_{12} may result in hematologic remission but neurological progression.

As with all preparations containing intrinsic factor, resistance may develop in some cases of pernicious anemia to the potentiation of absorption of physiological doses of vitamin B_{12}. If resistance occurs, parenteral therapy, or oral therapy with so-called massive doses of vitamin B_{12}, may be necessary for adequate treatment of the patient. No single regimen fits all cases, and the status of the patient observed in follow-up is the final criterion for adequacy of therapy. Periodic clinical and laboratory studies are considered essential and are recommended.

In extremely rare instances, skin rash suggesting allergy has been noted following the oral administration of liver-stomach material. Allergic sensitization has been reported following both oral and parenteral administration of folic acid.

Hemochromatosis and hemosiderosis are contraindications to iron therapy.

Adverse Reactions: In rare instances, iron in therapeutic doses produces gastrointestinal reactions, such as diarrhea or constipation. Reducing the dose and administering it with meals will minimize these effects in the iron-sensitive patient.

Dosage: One Pulvule twice a day. (Two Pulvules daily produce a standard response in the average uncomplicated case of pernicious anemia.)

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Brief summary. Side effects: Blurring of vision, dry mouth, difficult urination, and flushing or dryness of the skin may occur on higher dosage levels, rarely on usual dosage. Administer with caution to patients with incipient glaucoma or urinary bladder neck obstruction as in prostatic hypertrophy. Contraindicated in patients with acute glaucoma, advanced renal or hepatic disease or hypersensitivity to any of the ingredients.

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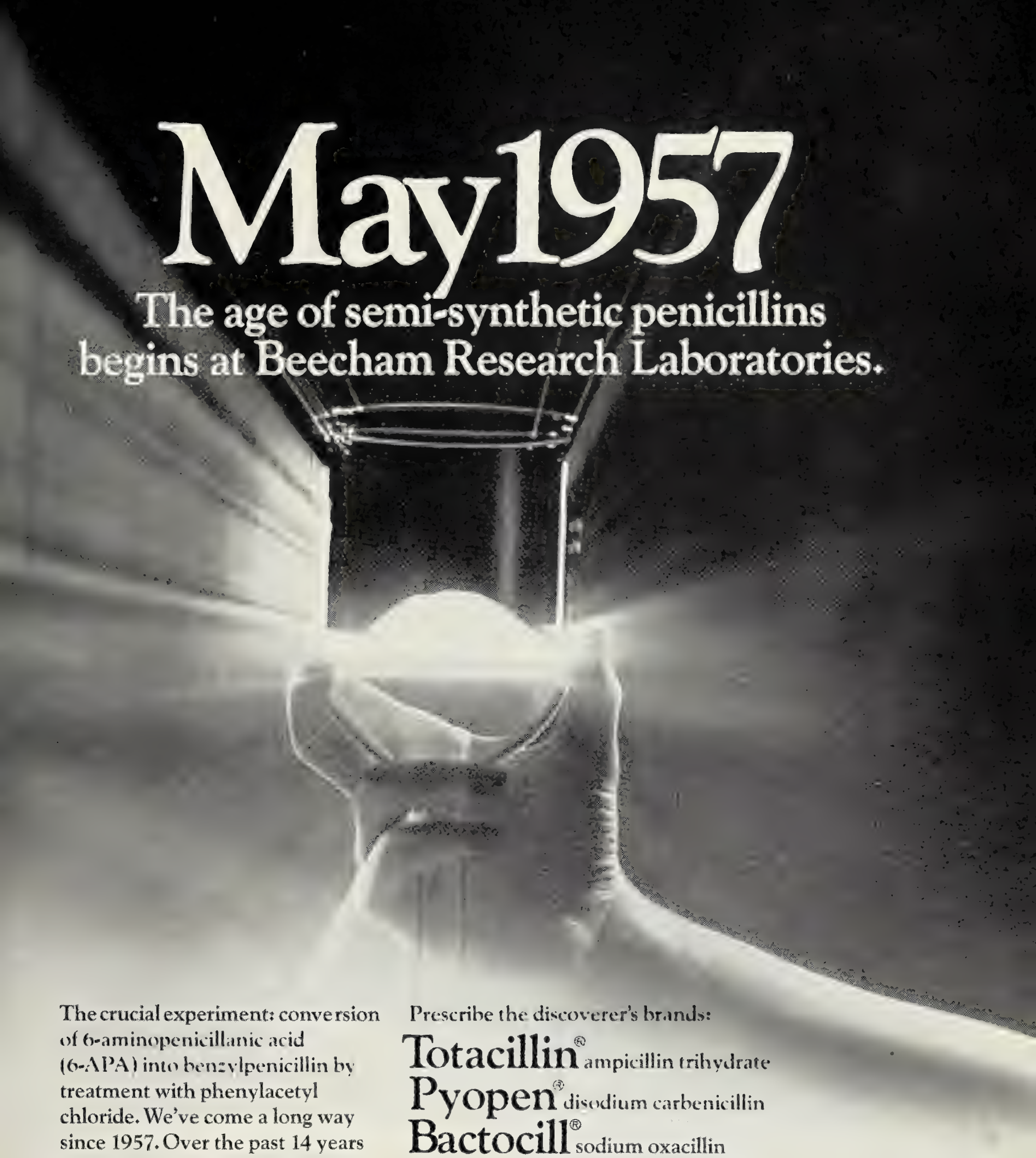

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Colin Campbell, MD, Ann Arbor,
is new assistant dean for student affairs at the University of Michigan Medical School. An associate professor of obstetrics and gynecology, Doctor Campbell will be acting for Robert Green, MD, during Doctor Green's sabbatical.

Joseph V. Fisher, MD, Chelsea,
immediate past president of the Michigan Academy of Family Physicians, is now an associate professor in the Family Practice Department of the Medical University of South Carolina in Charleston. He practiced 31 years in Chelsea, where he served as president of the school board for nine years, chairman of the village planning commission and secretary of the Washtenaw County Community Mental Health Board.

Benjamin Jeffries, MD, Detroit,
is a new member of the Detroit-Macomb Hospitals Association Board of Trustees. Doctor Jeffries also is chairman of the advisory council, Michigan Department of Mental Health, and director of the Michigan Society for Mental Health. He serves as chairman of the MSMS Committee on Mental Health.

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Edward J. Lynn, MD, East Lansing,
is new director of the Community Mental Health Center located at St. Lawrence Hospital, Lansing. He succeeds Donald Weston, MD, who resigned to become an associate dean in the MSU College of Human Medicine. Doctor Lynn formerly was an assistant professor in psychiatry at MSU and was president of the Drug Education Center in East Lansing.

Alexander H. MacGregor, MD, White Pigeon,
is new president-elect of the American Physicians Art Association. He was named at the APAA's recent annual exhibition in San Francisco in conjunction with the AMA annual meeting.

Lambertus Mulder, MD, Muskegon,
is new president of the Michigan Industrial Medical Association. Other officers are William Rye, MD, Kalamazoo, president-elect; Louis W. Staudt, MD, Birmingham, vice president, and Robert L. Watling, MD, secretary-treasurer.

Norman D. Nigro, MD, Detroit,
is one of six U.S. surgeons whose comments on treatment of symptomatic hemorrhoids appear as a "Forum" in the July 10 issue of *Modern Medicine.*

Harold Plotnick, MD, Detroit,
is new president of the Michigan Dermatological Society. Other new officers are Robert Grekin, MD, Kalamazoo, president-elect; Ralph J. Coskey, MD, secretary-treasurer; Amir Mehregan, MD, Monroe, recorder.

Ruth Kraft Strohschein, MD, Detroit,
was awarded an honorary doctor of humane letters at June commencement exercises at Wheaton College. Senior pediatrician at Children's Hospital, Doctor Strohschein previously was named Medical Woman of the Year by the American Medical Women's Association and received the Distinguished Alumni Award of Michigan State University.

Joseph J. Woods, MD, Detroit,
is new president of the Michigan Society of Obstetricians and Gynecologists. Other new officers are George W. Morley, MD, Ann Arbor; Robert G. Walkowiak, MD, Detroit, secretary, and John M. Malone, MD, Farmington, treasurer.

Louis R. Zako, MD, Westland,
is new chief of family practice at the 105-bed Metropolitan Hospital and Health Center West, in Westland. Doctor Zako, an MSMS councilor, formerly was in private practice in Allen Park.

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In memoriam

John R. Flick, MD
Birmingham

John R. Flick, MD, who practiced in Royal Oak for more than 30 years, died July 20 at the age of 64. Doctor Flick resided in Birmingham.

A graduate of the Wayne State University School of Medicine, Doctor Flick was a surgeon. He was a founder and former owner of Ardmore Hospital, Ferndale, and a member of the American Society of Abdominal Surgeons.

George C. Hardie, MD
Jackson

George C. Hardie, MD, Jackson otolaryngologist and ophthalmologist for more than 40 years, died June 26 at the age of 73. He was a past president of the Jackson County Medical Society and former chief of staff at Foote Hospital, Jackson.

In 1963, Doctor Hardie was honored by his community as "Citizen of the Year" for his work with underprivileged children and for providing free eye care to children through the Lions Club. He was named "Layman of the Year" in 1962 by the local Presbyterian church following his work in the Cameroons, West Africa, where he taught eye surgery to a missionary surgeon.

Doctor Hardie was a native of Vancouver, British Columbia, and came to Jackson in 1925. He was a graduate of the University of Toronto Medical School.

Herbert G. Kleekamp, MD
Saginaw

Herbert G. Kleekamp, MD, Saginaw physician for 39 years until his retirement in 1962, died July 22 at the age of 77.

Doctor Kleekamp was graduated from the University of Michigan Medical School in 1923 and was a staff member at Saginaw General Hospital from 1930 to 1955. He served as chief of staff at Saginaw General for four years and also was affiliated with St. Luke and St. Mary hospitals.

Doctor Kleekamp was past president of the Saginaw County Medical Society.

Harold J. Kullman, MD
Dearborn

Detroit-area gastroenterologist for 32 years, Harold Kullman, MD, died July 20 at the age of 70.

Doctor Kullman was a member of the board of Blue Shield from 1941-42, was a former professor of clinical medicine at WSU College of Medicine, and also was a registered Michigan pharmacist.

Doctor Kullman was a graduate of WSU School of Medicine and was affiliated with the VA hospital in Dearborn. He also had served as a consultant at Detroit Receiving, Wayne County General and Harper Hospitals.

He was past president of the Detroit Medical Club and Detroit Gastroenterological Society, and was a member of the American College of Physicians, the American Gastroscopic Society and the Detroit Academy of Medicine.

Clement J. Pollina, MD
Detroit

Clement Joseph Pollina, MD, director of medical education in internal medicine and assistant chief of medicine at The Grace Hospital, Detroit, died July 13 at the age of 46.

Doctor Pollina was a private practitioner in Grosse Pointe for 16 years before accepting the hospital position. He was a clinical instructor with the WSU School of Medicine since 1954 and was a member of the WSU Medical Alumni Association Board of Directors.

A graduate of the WSU School of Medicine, Doctor Pollina also was affiliated with Detroit General, St. John and Bon Secours hospitals.

Alvord R. Sanderson, MD
Grosse Pointe Park

Detroit-area physician for 60 years, Alvord Robert Sanderson, MD, Grosse Pointe Park, died Aug. 5 at the age of 85. He was practicing medicine at the time of his death, and estimated he had delivered more than 6,000 babies.

A graduate of the Detroit College of Medicine, Doctor Sanderson was an honorary member of the staff of Jennings Hospital and was on the staffs of Cottage Hospital. He was an obstetrician-gynecologist.

A. M. Wehenkel, MD
Detroit

Retired Detroit physician A. M. Wehenkel, MD, died July 11 at the age of 94. He had resided the past 14 years in Leamington., Ont., and Sarasota.

Doctor Wehenkel was a graduate of the Detroit College of Medicine and was director of the Detroit tuberculosis clinics. He established his own private sanatariums in Farmington and Romeo.

Doctor Wehenkel was on the teaching staff of the Detroit College of Medicine, was a life member in the American College of Physicians, the American College of Chest Physicians, the National TB Association, and the Thoracic Society.

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Typo makes Jean Pearson do double-take

"I didn't write that, did I?"

Jean Pearson, veteran science writer, raised that question when she got back to Detroit and read the back copies of the Detroit *News* to check the stories she had filed from the AMA meeting in San Francisco.

She read the one article and finally went back to the original copy to satisfy her curiosity.

The *News* byline article by Jean that day reported that an AMA speaker told the House of Delegates the "AMA finances were shady . . ."

That was not the way she wrote it.

The error by a typesetter certainly changed the article.

Jean had written that the "AMA finances were shaky."

Because the typographical error bothered Jean so much, she called Herb Auer, manager of the MSMS Department of Communications, and urged that he explain to the MSMS leaders what she really wrote.

So here's the explanation . . .

— Herb Auer

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MEDICAL DIRECTOR: To be responsible for program formulation and administration of a single county health department. Experience in administration and public health desirable. Salary to $2250 monthly, plus fringe benefits. Michigan license required. Contact Herman Ivory, Acting Director, Muskegon County Health Department, County Building, Muskegon, Michigan 49440. Phone: (616) 726-4711.

PRISON PHYSICIAN 17: To fill immediate vacancies. Salary range $26,370 to $32,280 annually. All Michigan civil service benefits. Must possess a license to practice medicine or osteopathic medicine and surgery in Michigan, plus five years of such experience. Send resume to Mr. Richard D. Crable, Chief, Recruitment and Placement, Michigan Department of Civil Service, Lansing, Michigan 48913 (MM). An equal opportunity employer.

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PHYSICIANS: Bd. Certified or eligible—two internists with interest in cardiology or pulmonary diseases; and one orthopedic surgeon. Also, physician for outpatient unit. 229 bed hospital with coronary care and soon to be activated respiratory care units. Hospital in small community Michigan Upper Peninsula offering ideal family living, a superior school system, and all-seasons sports vacationland. Full staff of highly qualified physicians, 80% Bd. Certified. Licensure, any state, U.S. citizenship. Salary based on qualifications. Excellent fringe benefits. Non-discrimination in employment. Contact: Chief of Staff, VA Hospital, Iron Mountain, Michigan 49801. Phone (906) 774-3300.

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OBSTETRICIAN-GYNECOLOGIST—Seeking position to work with others in Ob-Gyn practice; Young man; Military completed; Excellent cred; Licenses in Michigan, Missouri, Alaska; Available July 1972; 16222 Schaefer Hwy. #7, Detroit, Michigan 48235.

GENERAL PRACTICE: Retiring after 45 years—office building for sale—and an excellent opportunity to step into a very lucrative practice. J. M. Scher, MD, 130 Cass Avenue, Mt. Clemens, Michigan 48043 (313) 468-4343.

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MEDICAL DIRECTOR, MD or DO, needed for large community clinic in Saginaw, Michigan. Salary $35,000 first year, extensive fringe benefits, forty hour week. Need physician with progressive ideas. Write Acting Medical Director, Saginaw Community Clinic, 2308 Wadsworth, Saginaw, Michigan 48601.

AUCTION: Hospital equipment and supplies. Liquidation at auction, Wednesday, September 20, 9:30 a.m. Walter Winchester Hospital, a Genesee County Facility at G-4562 Flushing Road, 2 miles west of Flint, Michigan. As ordered sold to the highest bidder, piecemeal, by the Genesee County Board of Commissioners. Selling complete laundry, kitchen and all food preparation equipment, hospital furniture (320 rooms), large amount of therapy equipment. For detail listing, write or phone (313) 635-9400, Perkins Sale Service, Auctioneers, Swartz Creek, Michigan 48473.

CLINIC ADMINISTRATOR, college degree, needed for large community clinic in Saginaw, Michigan. Health background and administrative knowledge desired. Clinic is progressive, designated to serve as model. Salary negotiable, good benefits. Write Acting Director, Saginaw Community Clinic, 2308 Wadsworth, Saginaw, Michigan 48601.

THREE RIVERS (St. Joseph County)—Michigan Community of 10,000 needs 5 doctors immediately either solo or group practice. Busy growing area, unlimited need due to several Drs. nearing retirement age. Two retired June '72. Set up practice with no financial obligation. Good consultation and academic resources. Office space available soon within a 94-bed hospital. County population 50,000. Excellent opportunity to establish challenging medical practice. Good recreational facilities, churches, schools, and theater. Above average income. Fine professional opportunity. Contact: Dr. Joseph Tironi, 221 N. Hooker Ave., Three Rivers, Michigan 49093. Phone (616) 273-3065.

HURRY—Our Wilderness Season extended for 1972. So we can book additional elk and deer hunters. Sept. 15-Nov. 29. Call or write today. John W. McMahon, MD, 2225—11th Avenue, Helena, Montana 59601 (406) 442-0671.

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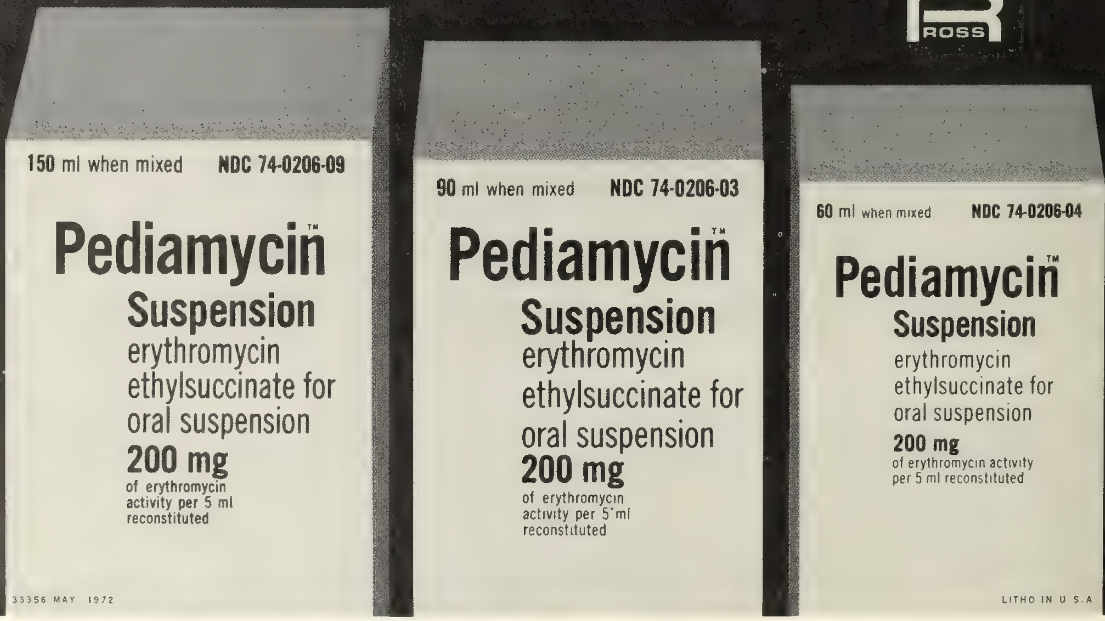
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33356 MAY 1972

LITHO IN U.S.A.

WCMS believes there's federation in your future, doctor

By Sidney Chapin, MD
Detroit

Physicians have become part of an industry—an industry in which third parties may usurp their traditional roles by setting fees and dictating billing procedures.

The physician may be placed in the same category as a barber proprietor whose haircut prices are set by a union. In the physician's case his fees may be determined by government, insurance firms and hospitals.

Historically the physician's position has been a respected one. Gradually, through the manipulations of the federal government, he has become subject to the whim of every politician and pressure group, and there are many enthusiasts in these groups who openly debase the physician's value to society.

CAN THE PHYSICIAN AFFORD TO CONTINUE TO BE COMPLACENT?

There is an obvious trend to force physicians into an employee situation in lay-controlled corporations. As Dr. Russell B. Roth puts it, "If that comes about, then, without collective bargaining we would be powerless."

Nurses, teachers, office workers, university professors, interns and other hospital workers, to mention a few, have dispelled the stigma of a "union" label. Big labor gains have been made in many white-collar areas.

The third-party payer has become the major source of income for many physicians and many of the para-professionals of medicine. Yet there is no provision for fringe benefits, job security or improved working conditions.

Physicians have been totally by-passed by negotiations. Government control poses a further threat of arbitrary salary levels without consultation.

IS IT NOT TIME TO BECOME MORE AGGRESSIVE AND MORE RESOLUTE?

Sidney Chapin, MD

In some areas single employer negotiations still exist, but experience shows that those with association bargaining are much better off.

In spite of the fact that the "union" appellation has been given to all medical societies, no negotiations have ever taken place.

The physician has been subjected to fee-cutbacks and freezes, and still no negotiating mechanism has ever emerged in medical circles.

The medical foundation concept, incorporation idea, association or federation have come of age The application of bargaining table know-how may be in order.

For two years the local chapter of the Council of Medical Staffs has debated the issue thoroughly. The majority believes that collective bargaining is the way of the future.

This is in contrast to the national office of the same organization which preaches a "lone, individual 'No' response" as the answer.

The Council of the Wayne County Medical Society believes there is a Federation in your future—a Peer Review method with a negotiating mechanism built into its organization.

Only the individual physician, the private practitioner, the primary physician, can make the decision for himself and his county medical society. If he is to continue to render quality medical service, as his own prerogative, a new strategy and new method must be developed.

Your concern for your patient, your charity and altruism are gradually going out of existence. If you do not protect your patient, who will?

CAN YOU GO IT ALONE?

COULD YOU SUPPORT A FEDERATION?

ARE YOU READY FOR COLLECTIVE BARGAINING?

Doctor Chapin is president-elect of the Wayne County Medical Society. His article is reprinted here from the June 26 issue of the Detroit Medical News.

Acupuncture: US-funded research is premature

By Arthur Taub
New Haven, Conn.

The recent announcement at the highest level of the National Institutes of Health of a "commitment" to study acupuncture in surgical anesthesia and in the treatment of pain resuling from chronic disease raises important questions.

It is accepted in the medical scientific community that all applications for research funds be buttressed by documentation of sufficient validity to support more than the mere plausibility of the hypotheses proposed to be tested. It has been accepted that the most searching on-site evaluation of the capability and past performance of the principal investigators in the fields of study involved be undertaken.

Acupuncture is an ancient system of medicine predicated upon a nonheuristic world view (Yin and Yang admixture) theoretically, and practically based upon a system of diagnosis (the subjective sensation imparted to the examiner by the beat of the radial pulse at the wrist) and therapeutic technique (the insertion of metal needles one to two millimeters beneath the skin, with or without the passage of minute amounts of electric current) which are totally without basis, in that no relationship has been established between segments of the radial artery and the various internal organs referred to.

Nor has physiological or therapeutic data been presented to indicate a special relationship between hypothecated acupuncture "points" or "meridians" and the functioning of internal organs. This latter is understandable, as current acupuncture practice differs little from that of antiquity, and it is only recently that the functions of internal organs have been accessible for study. No controlled statistical evidence has ever been forthcoming (from Chinese or from the many Western European practioners of acupuncture) that acupuncture is in any way superior to placebo in chronic-pain treatment.

While evidence for acupuncture anesthesia appears on the surface to be striking, it must be recognized that, in its present form, it is purely anecdotal, and generally represents reportage to the West from non-Chinese-speaking guests of the Chinese People's Republic visiting China for other purposes.

While it would appear legitimate to arrange for the travel to China of an experienced, Chinese-speaking anesthesiologist, it seems premature to convene "workshops" to discuss such matters. It is difficult to understand how the award of funds for the study of a modality of therapy for chronic pain can be envisaged when neither evidence for its efficacy nor a plausible hypothesis for its action can be advanced.

It would indeed be tragic if such a premature openness to research funding in acupuncture were to be interpreted by the public as an endorsement of the technique, which, of course, was not what was intended but which will surely follow. While placebo effects have their place in therapy, the absence of adequate diagnosis before treatment may lead to needless suffering and in some cases to avoidable death.

If criteria other than those long established for the acceptance of research proposals in the medical sciences were used on the one hand to convene a "workshop," and will be used, on the other hand, to evaluate future proposals, it is perhaps these new criteria and the decision leading to them, and not acupuncture, which would require further study.

The writer is director of the Neurosurgical Research Laboratory and the Pain Diagnostic and Therapeutic Division, Neurosurgery Section, at Yale.

This letter is reprinted, with permission, from the Aug. 8 edition of THE NEW YORK TIMES.

We must support the AMA

The eternal cry is raised, who needs the AMA? What does it do for me? It's too liberal! It's too reactionary! It's too conservative!

Anyone who has followed the AMA knows that the voices of dissension and criticism are now being heard in that organization. As all organizations must change to survive, the AMA is changing. What direction it takes depends on those of you who are interested enough to have a part of the action.

There is not a single physician in this country today who has not benefited from the AMA when one considers the fantastic amount of work that they have done on a national scale in all facets of medicine and public health. A look at their journals, magazines, committees, councils, and task forces will vouch for this.

I think it is morally unacceptable for us to share in the benefits of the AMA without supporting the AMA.

(Excerpt from a speech by Edward Siegel, MD, president of the Medical Society of New York, to MSNY.)

The following outline was prepared by the MSMS Bureau of Economic Information.

FACTS ON MEDICAID AND MEDICARE

Physicians believe many people are trying to blame the medical profession for the soaring costs of Medicare and Medicaid by telling the public only half the story. Please read the following reported—and unreported—sides of the story . . . and then make up your own mind.

REPORTED: Doctors get the lion's share of each Medicare-Medicaid dollar.

***UNREPORTED:** Social Security Administration records show that during fiscal 1969 doctors received only 18 cents of each Medicare-Medicaid dollar. Hospitals and nursing homes received 60 cents. The balance is for drugs, dental and other services.*

REPORTED: Doctors charge what they please under Medicare and Medicaid. A government ceiling on doctors' fees would prevent this.

***UNREPORTED:** Ceilings WERE placed on doctors' fees for Medicaid on January 1, 1969, but have had little effect on overall costs. Medicaid expenditures for Michigan, for instance, increased from $44.5 million during fiscal 1970 to $64.5 million in 1971, an increase of 45.1%.*

REPORTED: The total government health care bill has jumped to about $22.5 billion—an outrageous figure.

***UNREPORTED:** Americans spend almost as much—$21.1 billion—each year on beer, wine and whiskey.*

REPORTED: One doctor in Colorado was paid $326,000 in Medicare fees in 1968.

***UNREPORTED:** The $326,000 actually went to 124 doctors at Colorado General Hospital. One doctor had been authorized to sign the bills for the entire medical staff, a procedure authorized by Medicare law.*

REPORTED: More than 2,500 doctors and 900 groups earned $25,000 or more from Medicare in 1968.

***UNREPORTED:** The physicians named represent only about 3 percent of the doctors treating Medicare patients. Furthermore, a majority specialize in the treatment of elderly patients, who comprise the bulk of their practice. Fraud? Since Medicare began in 1966, only TWO doctors—just TWO—have been convicted of fraud. None in Michigan. (Over 350,000 doctors practice in the United States.)*

REPORTED: During fiscal 1970, Medicare cost ballooned to $6.8 billion.

***UNREPORTED:** To win people as voters without scaring them as taxpayers, bureaucrats in 1965 said Medicare would cost only about $2 billion a year. Organized medicine warned it would cost much more. Who was right?*

REPORTED: Doctors' fees have jumped 53 percent since 1957.

***UNREPORTED:** Wages and benefits for all employed people jumped 70* *percent during the same period, and a doctor's purchasing power has declined 40 percent since 1957.*

REPORTED: A government-run, national compulsory health care insurance system is an effective and efficient alternative to the present system.

UNREPORTED: Even the Senate Finance Committee report admits administration of Medicare and Medicaid is "erratic, inefficient and costly." Do we want more of the same? Average patient stay in a private hospital is between 7 and 9 days—at an estimated cost of $68 a day. Average daily stay in government hospitals is 25 to 35 days—with costs between $100 and $150 per day.

REPORTED: Doctors are keeping patients in expensive private hospitals too long, when nursing homes would suffice in some cases.

UNREPORTED: The government itself is wasting millions by requiring Medicare patients to spend three days in a hospital to be eligible for admittance to nursing homes.

REPORTED: Doctors don't care about rising health care costs.

UNREPORTED: The medical profession is taking definite steps to cut its share of the bill—steps such as organizing effective "peer review" or watchdog committees to check on fees charged by fellow doctors. Cooperation between the doctor, patient and government agencies can cut costs while guaranteeing continued quality health care.

'The HMO is not a panacea'

Anne R. Somers, nationally-known medical educator and economist, in her recent speech at Traverse City for the MSU-sponsored conference on the role of the community in undergraduate medicine, said:

". . . I do not think the HMO is the panacea for all our delivery problems; nor is it a panacea for all the problems of academic medicine.

"In this respect I refer all academicians to the last chapter in the 1971 Symposium sponsored by Kaiser especially for the medicine schools. In his 'Caveats for the Medical Schools,' Dr. Ernest Saward, one of the founding fathers of the Kaiser system wrote,

> " 'No model system should be expected to be universally applicable, for our society is too diverse . . . The generic purpose of prepaid group practice is other than to subsidize the teaching program of a medical school. Educational costs must be identified as such and directly funded, not vicariously or by subterfuge.'

"The school that rushes headlong into the HMO business as a way to pick up easy federal money and recapture a captive patient population is, I am sure, in for some very stormy days. The embarrassment now being felt by some schools with respect to their OEO centers, as federal support dwindles for some of these projects whose innovative image is already beginning to fade, could be multiplied manyfold. The public relations consequences alone could be serious."

Interesting . . .

Recently the Michigan State Chiropractic Association sponsored a seminar in Detroit on acupuncture. The public likely read the several news stories not knowing that Michigan law prevents chiropractors from this Chinese technique.

Detroit Free Press Medical Writer Dolores Katz permitted herself to be a volunteer and reported the guest expert "twirled the two-inch-long stainless steel needle into my arm in the approved manner for five relatively painless minutes, but my arm was not anesthetized."

Miss Katz also wrote in the *Detroit Free Press*: "A chiropractor who was present pressed my right shoulder producing a sharp pain, and announced that I'm having trouble with my right ovary (not true), that I have sinus problems (never!) and headaches (not true), and that my right leg is two inches shorter than my left (I don't think so)."

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LATE NEWS FROM THE MICHIGAN STATE MEDICAL SOCIETY

Michigan Medicine

September 27, 1972, Volume 71, Number 28
Michigan State Medical Society
Reading Time: 2 min. 40 seconds

A MANDATE FROM MSMS to the State Department of Social Services was presented Sept. 21 asking the State to abandon the one-time Medicaid provider agreement. The MSMS ad hoc negotiating committee of Doctors Adler, Coury, Griffin and Masters charged the State to re-evaluate its position in favor of the one-time agreement. The MSMS Council Sept. 13 instructed the committee to aggressively pursue a return to the per case agreement program and to change items 18 and 34 on the invoice form. Several component societies are urging their members not to sign the one-time form. MSMS is awaiting a reply from the State.

ALL 8,011 MSMS MEMBERS are invited to participate in the excellent scientific programs and short PG courses during the 1972 Annual Scientific Session at the Sheraton-Cadillac Hotel, Detroit, Oct. 3-4-5. Members also may testify Monday, Oct. 2 before the reference committees of the MSMS House of Delegates, which will be in session Oct. 1-2-3. Questions about program details, PG course registrations, meal reservations, etc., should be directed to Miss Helen Schulte, at MSMS 517/337-1351. Leaders are enthusiastic about the possibilities of topping previous registration. See you there . . .

MSMS MEMBERS WISHING to suggest ways to improve the AMA are invited to appear before the AMA Council on Long Range Planning and Development at the Sheraton-Cadillac Hotel, Oct. 2 from 10 a.m. to noon, from 1 to 3:30 and from 6 to 8 p.m. No advance appointment is necessary.

MSMS WILL PRESENT postgraduate programs this fall in 18 communities, beginning with two programs on Oct. 3 -- at Battle Creek and at Grand Haven. A mailing has been made to physicians in the counties being served by the series arranged for by the MSMS Committee on Postgraduate Medical Education.

THE STATE DEPARTMENT of Social Services advises that as of August 1, the first 10% of enrolled physicians began submitting Medicaid invoices to the Bureau of Medical Assistance for services rendered on or after this date. Michigan Blue Shield will accept and process claims for services rendered prior to August 1 until October 1. Effective October 1, all claims regardless of date of service must be submitted to the State for processing and payment.

The remaining 90% of enrolled physicians should begin submitting claims to the Bureau on October 1 for services rendered on or after this date. Services rendered prior to October 1 will still be processed by Blue Shield until December 1. On December 1 all claims are to be sent to the State regardless of date of service.

Questions concerning reimbursement policies are to be directed to the Department of Social Services in Lansing or phone toll-free: 1-800-292-2550.

ROBERT HEAVENRICH, MD, Saginaw, will be installed Oct. 18 in NYC as the new president of the American Academy of Pediatrics.

THE U.S. SENATE HAS passed Sen. Kennedy's Health Maintenance Organization and Resources Development Act, a bill which would authorize $5.19 billion in federal grants and loans over a three-year period for the creation and development of pre-paid group practice plans. Senate rejected an amendment to recognize medical foundations as HMOs. But U.S. House Subcommittee on Public Health and Environment reported another HMO version. It calls for 3-year program of feasibility studies, initial development, construction and operation of HMOs, with limit of no more than 150 HMO-type organizations receiving U.S. aid. Effects would be studied after three years before further federal aid is forthcoming. Senate bill is S-3327; House bill is HR 16782. Final decision now lies with House.

MC CULLAGH LEASING, INC. reports that the new car leasing program is off a good start. Several inquiries have been received and applications are being processed. Members interested in '73 models should call McCullagh Leasing, Inc. (313) 294-7800.

INVITATIONS HAVE BEEN sent to six component medical societies in the Central Michigan area to have them hold a membership dinner meeting at the MSMS headquarters this fall or next spring. This is an effort of the MSMS Department of Communications to get more doctors into the headquarters, to meet the staff, etc. Eaton, Shiawassee and Livingston component societies visited MSMS this past spring.

HOW MUCH INTEREST is there in national health insurance? One barometer might be the fact that the national intercollegiate debate topic this school year is: "Resolved: That the federal government should provide a program of comprehensive medical care for all U.S. citizens." AMA is providing kits of information to college and university debate teams.

THE AMA HAS PUBLISHED a new financial aid directory of 1,000 scholarships, grants and loans available to medical and allied health students. The publication, called "Find," is available free to component societies and $1.95 for individual physicians. Write to Jonita Hegenderfer, Special Projects, AMA, 535 N. Dearborn St., Chicago 60610.

THE MDPAC BOARD of Directors reminds every doctor to be sure that he, members of his family, and office staff are registered to vote in the No general election. To be eligible to vote, you must be at least 18 years old, be a resident of Michigan for at least 30 days, and register to vot before 8:00 p.m. October 6. You may register with the local city or tow ship clerk.

September 27, 1972 Vol. 71, No. 28

Michigan Medicine

MICHIGAN STATE MEDICAL SOCIETY

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EDITOR: HERBERT A. AUER

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ATE NEWS FROM THE MICHIGAN STATE MEDICAL SOCIETY

Michigan Medicine

October 26, 1972, Volume 71, Number 29
Michigan State Medical Society

IE OBJECTIONABLE, ONE-SIDED broad provider agreement for Medicaid has been scrapped the State.

ie State agreed to eliminate the broad provider agreement after the MSMS House of elegates stand was explained to Governor Milliken and to 5 of his representatives pointed to a new Liaison Committee named to meet with MSMS representatives.

fter the House took its firm stand October 3 against the broad provider agreement, eaders of MSMS went to Lansing Oct. 5 and informed the governor. He asked that MSMS ame a new Liaison Committee to meet with a counterpart committee he would name. The MS Council met in special session Oct. 9 and named five physicians to the new MSMS eam. MSMS sent a letter Oct. 11 to all physicians explaining the House position and king all physicians to not sign the agreement or to resign if already signed.

Oct. 12, the two liaison committees conferred and MSMS again detailed the new House sition. The State, after telling MSMS leaders at several negotiating sessions ring August and September that the broad provider agreement was not negotiable, greed that morning to seek a solution to the dispute so physicians could be reimbursed r medical care to Medicaid patients.

t that same meeting Oct. 12, MSMS representatives proposed a new "Identification Form" o provide biographic, business information needed by the State for computer purposes. he State accepted the idea and decided it could be called the "Physician and Dentist dentification Form." The State Dental Association also had objected to the broad rovider agreement.

HE MSMS LIAISON COMMITTEE then reported to the MSMS Council that the House objections o the broad agreement had been overcome and The Council voted to ratify the Committee eport.

he State Liaison Committee members and the MSMS members will continue to meet to pursue other issues such as further amendments in the invoice form, definition of an mergency, etc.

s part of the new agreement, MSMS agreed to provide the State a covering letter to be ent to all physicians with the new "Identification Form." MSMS Legal Counsel A. tewart Kerr has declared that the new Identification Form is NOT a provider agreement.

he State, in a companion covering letter, explained that the identification numbers ssigned to physicians who previously had signed the agreement form will be continued. hysicians who have resigned or who have never signed are asked to send in the new dentification Form immediately. The State then, as quickly as possible, will give he doctor a number and a supply of invoices to use.

N PREVIOUS NEGOTIATIONS BEFORE the MSMS House meeting, the State agreed to make 16 hanges in the Medicaid invoice as requested before by MSMS. These changes will be ncorporated into the next printing of the invoice. MSMS agreed that the original upply should be used first, in the interest of state economy.

THE NEW MSMS MEDICAID LIAISON Committee, which worked out the differences with the State, is comprised of Brock E. Brush, MD, Detroit, vice-chairman, MSMS Council; Jame D. Fryfogle, MD, Detroit, vice-speaker, MSMS House; Paul T. Lahti, MD, Royal Oak, member of MSMS Council and the House of Delegates; David Siegel, MD, Lansing, and Robert J. Toteff, MD, Saginaw, both members of the House.

The Committee reported to The Council that, "The Committee feels it has accomplished the mandate of the House. The new procedures will permit the physician, as he has in the past, to care for any Medicaid patient he chooses and to submit a statement for services rendered."

MEMBERS OF THE GOVERNOR'S COMMITTEE are John Dempsey, PhD, of the governor's personal staff; K. P. Frankland, legal counsel to the governor; R. Bernard Houston, director, State Dept. of Social Services; Maurice Reizen, MD, director, State Dept. of Public Health; Donald Smith, MD, special advisor to the governor on health and medical affai

* * *

NEWS HIGHLIGHTS OF RECENT HOUSE OF DELEGATES SESSION

By Jeanne Smith
Department of Communications

MAJOR DEBATE over the Michigan State Medical Society's position on the permanent provider agreement for the new Medicaid system required by the State Department of Socia Services and on the question of abortion reform to be put to Michigan voters in a Nov. 7 referendum sparked the 1972 fall meeting of the MSMS House of Delegates in the Sheraton-Cadillac Hotel in Detroit, Oct. 1-3.

On Medicaid, delegates voted to advise members not to sign the "broad" provider agreement required by the state with its assumption of fiscal administration of the Medica program from Blue Shield, the former fiscal agent.

DELEGATES GAVE SUPPORT ENDORSING the abortion reform referendum after amending it to add the requirement of patient counselling prior to any operation. The Nov. 7 Propos B provides that "a licensed medical or osteopathic physician may perform an abortion at the request of a patient, if the period of gestation has not exceeded 20 weeks, an that this procedure shall be performed in a licensed hospital or other facility approved by the Department of Public Health."

Delegates passed a resolution rescinding 1971 house action asking establishment of a uniform fee schedule for Medicaid payment and re-endorsed support of the "usual, customary and reasonable fee payment mechanism as in the best interest of the patient and the physician."

Delegates put MSMS on record as encouraging "additional legislation and stricter enforcement of existing regulations for the control of the drinking driver," and continuing to "support and improve methods of education and rehabilitation of the drinking driver."

SEVERAL RESOLUTIONS DEALING with health care and rights of patients were adopted. One called for support of federal legislation "to provide rehabilitative care for the chronically ill and disabled patients to restore them to optimal physical, mental, social, vocation and economic usefulness, these needs to be determined by trained medical doctors and not laymen."

Another resolution affirmed MSMS opposition to the promotion and sale of medical and/ disability insurance policies which are restricted in coverage and broad in exclusion devices.

Delegates called for MSMS to investigate the feasibility of removing Ritalin from the dangerous drug list and to aid colleges and universities in obtaining qualified instructors for health courses.

The delegates also called for action to inform patients seeking care at hospital outpatient departments or emergency rooms of their right to private medical care and the availability of such care.

DELEGATES ALSO DIRECTED that the MSMS Council urge the Michigan Department of Social Services to publish and distribute a manual outlining the benefits and exclusions of the Medicaid program.

Another resolution called for MSMS to inform members of the legal and ethical implications of assigning patients to emergency or other broad scope services during absence from practice.

The House approved issuing separate charters to the Gratiot County and Isabella-Clare County Medical Society prior to Jan. 1, 1973 and thus split up the three-county component.

Delegates also passed a resolution that MSMS endorse and offer assistance to Michigan State University's plan to consider community-based medical training in the Upper Peninsula and to encourage the MSU College of Human Medicine to recruit qualified students from rural Michigan for such a possible program.

Another resolution called for MSMS to back the continuing rights of the patient for privileged communication and confidentiality and support mental health and drug addiction agencies in their effort to protect rights of patients in this area.

Another resolution reaffirmed and called for publicity and implementation for MSMS defense, after peer review and substantiation, of a physician in a dispute over fees in a case involving a third party carrier.

ANOTHER RESOLUTION DIRECTED the MSMS Bureau of Economic Information to obtain annually a cost and benefit comparison of various health insurance plans available in Michigan and to distribute this information to physicians and to others, on request.

Also approved was a resolution seeking a change in Medicare emergency room regulations, set by federal law, to provide that a physician be responsible for care and treatment of all patients who arrive for treatment. The regulation now requires that a physician personally see each Medicare patient.

Delegates put MSMS on record as encouraging legislation similar to that recently passed in California requiring that a plaintiff in a malpractice suit post a cash deposit or bond as security for covering the defendant's costs and attorney fees in the case that the plaintiff fails to receive damages.

Another resolution approved efforts of the MSMS Judicial Commission to establish an equitable means of handling complaints against physicians who are not members of the society.

DELEGATES ALSO DIRECTED the appointment of an ad hoc committee to study and make recommendations on the delivery of health care within the Michigan penal system and also to make the same services available to other state institutions at their request.

A proposal asking the Michigan Board of Registration in Medicine to make it mandatory that doctors of medicine in practice be members of a county medical society was referred to the MSMS Council for study.

Resolutions asking that MSMS declare as unethical the exploitation of physicians and physicians' services for profit and that MSMS declare it unethical to require physicians to take care of patients in the outpatient department as a requirement for staff privileges were referred to the MSMS Judicial Commission. Another, that the deans of the three medical schools in Michigan (if members of MSMS) be seated as members of the House of Delegates, was referred to the Committee on Constitution and By-laws.

JOHN J. COURY, MD, OF PORT HURON was installed as MSMS president, succeeding Sidney Adler, MD, of Detroit. Brooker L. Masters, MD, of Fremont, retiring MSMS Council chairman, was named president-elect and will move up into the presidency in October, 1973.

Elected to succeed Doctor Masters as Council chairman was Robert M. Leitch, MD, of Battle Creek, who had served as vice-chairman.

Re-elected to office were Vernon V. Bass, MD, of Saginaw, speaker of the House of Delegates; and James D. Fryfogle, MD, of Southfield, vice-speaker.

Brock E. Brush, MD, of Detroit, Robert M. Leitch, MD, Adam McClay, MD, of Traverse City, and Donald T. Anderson, MD, of Kingsford, were re-elected to The Council. Newly elected to The Council are Leland E. Holly, II, MD, of Muskegon, Paul T. Lahti, MD, of Royal Oak, and Robert M. Stow, MD, of Lansing.

Elected as AMA delegates were John J. Coury, MD, of Port Huron, George W. Slagle, MD, of Battle Creek, and Donald N. Sweeny, Jr., MD, of Detroit, incumbents, and James C. Danforth, MD, Detroit. Elected as alternates were Marjorie Peebles-Meyers, MD, of Detroit, Vernon V. Bass, MD, of Saginaw, and Robert C. Prophater, MD, of Bay City, incumbents, and Kenneth Ray, MD, of Grosse Ile. Doctor Danforth succeeds Joseph A. Witter, MD, Rochester, who was not a candidate, as a full delegate, and Doctor Ray is the new alternate.

Certificates of commendation for outstanding service to medicine and their communities were awarded to Lawrence G. Bateman, MD, of Flint; Dean C. Burns, MD, of Petoskey; Elisha S. Gurdjian, MD, of Detroit; Robert M. Nalbandian, MD, of Grand Rapids, and Arthur L. Stanley, MD, of Lansing.

THE OFFICIAL REPORT ON action by the MSMS House of Delegates will be published later this year. Physicians may request copies of resolutions from the MSMS Department of Communications prior to publication of the official proceedings.

Photographs and additional articles will appear in the journal issues of Michigan Medicine.

October 26, 1972 Vol. 71, No. 29

Michigan Medicine

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Michigan Medicine

EDICAL SOCIETY • VOLUME 71, NUMBER 30 • OCTOBER, 1972

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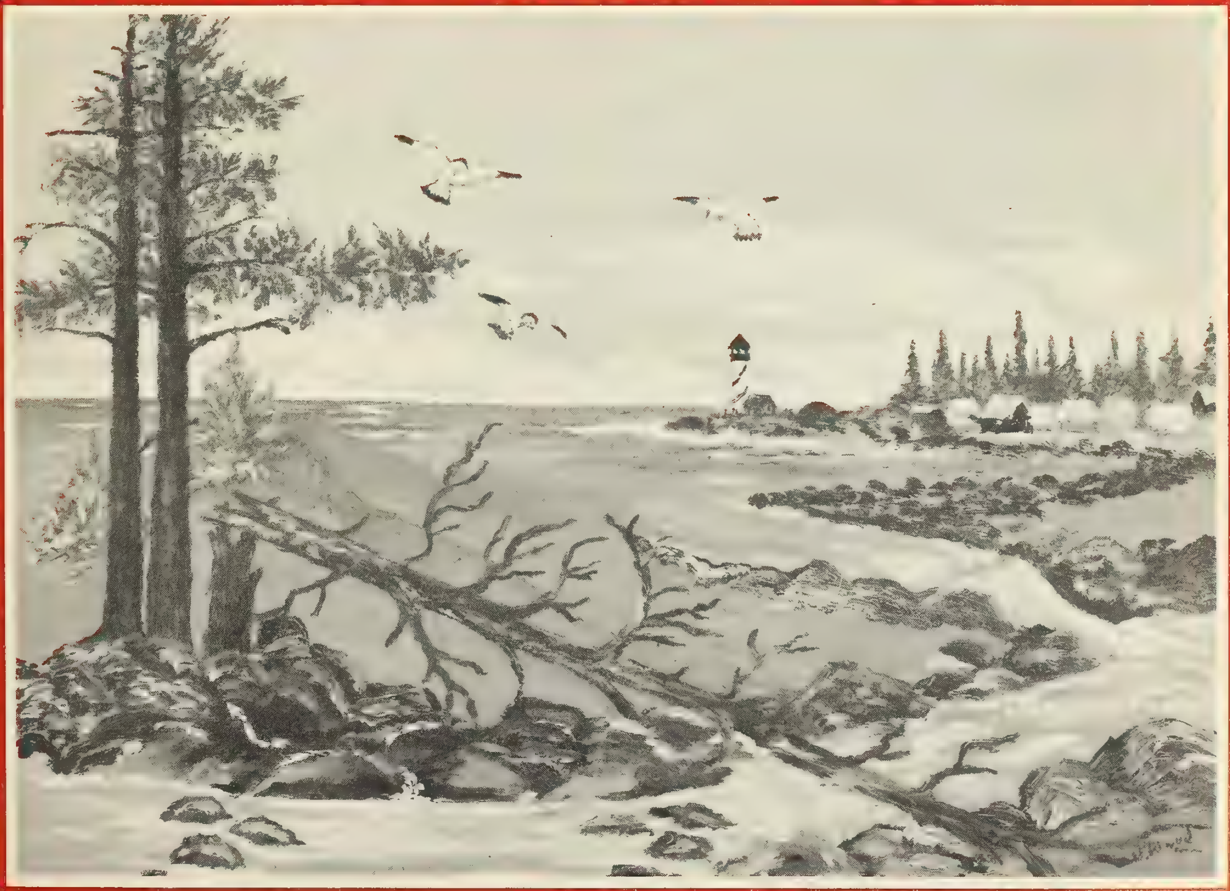
Michigan artist Jim Wood's intriguing northern Michigan shoreline scene graces the cover of this issue. The story of Mr. Wood, who is paralyzed and paints with a mouthstick, is inside, along with other special articles.



Everybody experiences psychic tension.

Most people can handle this tension.

Some people develop excessive psychic tension and need your counseling,

and a few may need counseling
and the psychotropic action of Valium® (diazepam).

Before deciding to make Valium (diazepam) part of your treatment plan, check on whether or not the patient is presently taking drugs and, if so, what his response has been. Along with the medical and social history, this information can help you determine initial dosage, the possibility of side effects and the ultimate prospects of success or failure.

While Valium can be a most helpful adjunct to your counseling, it should be prescribed only as long as excessive psychic tension persists and should be discontinued when you decide it has accomplished its therapeutic task. In general, when dosage guidelines are followed, Valium is well tolerated (see Dosage). For convenience it is available in 2-mg, 5-mg and 10-mg tablets.

Drowsiness, fatigue and ataxia have been the most commonly reported side effects.

Until response is determined, patients receiving Valium should be cautioned against engaging in hazardous occupations requiring complete mental alertness, such as driving or operating machinery.

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Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

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To help you manage excessive psychic tension

Washtenaw county society gets involved - with health of the community at heart

By Judith Marr
Managing Editor

Ann Arbor, as most Michigan physicians know, has two major hospitals—St. Joseph Mercy, serving the community, and University, the teaching and research facility in the University of Michigan Medical Center.

For a variety of reasons, there have been increasing negotiations between St. Joseph and University hospitals to amalgamate their services, according to Dean P. Carron, MD, president, Washtenaw County Medical Society.

These activities culminated in a proposed affiliation agreement made public late last spring.

The agreement provided "a real spark" to the Washtenaw County Medical Society's awareness of its responsibility in medical planning in the community, Doctor Carron says. "I think the hospitals are aware—we've kept them aware—that even if we're not asked we're going to be actively involved in this type of planning."

The county society's actions have been "gentle and gentile," he continues. "There's been no desk-pounding." But they've been effective, and can serve as a model of community involvement for other county medical societies.

The Washtenaw Society believes it has a dual role, to look out for the interest of both the doctors and community.

"We feel it is our responsibility to be concerned with the delivery of health care from the public's point of view," Doctor Carron says. "We want to be satisfied that both the community and doctors are not going to suffer in this affiliation."

The county society's fear, he says, is that the affiliation will limit the treatment potential to the community, and make even more difficult the work of the general practitioner.

As a result of the Washtenaw Society's actions, the two hospitals have gone "back to the drawing board," reopening negotiations on their affiliation agreement. As this article was prepared, a final draft was not completed.

The county society began to make waves when, at a special executive council meeting June 19, it reviewed the report of a special task force to study the affiliation agreement and drew up six recommendations to express its feelings in the proposed merger of the two hospitals. Previously, a copy of the affiliation agreement had been sent to the county society "in the expectation," Doctor Carron recalls, "that it would be acted on and approved by the doctors."

The Washtenaw Society's Committee on Legal Affairs previously had determined that the agreement was nebulous. The agreement then was referred to the medical society's legal counsel for an interpretation of the language and his opinion was presented to the hospital staffs, to be certain the doctors understood what they were to approve.

Then followed the special executive council meeting, the drawing up of the recommendations and the presentation of the recommendations to the hospitals' administrators and governing boards. Just one month later, the county society learned of the reopening of negotiations.

"It's important to point out that we were not against the agreement in principle, but in details," Docor Carron points out.

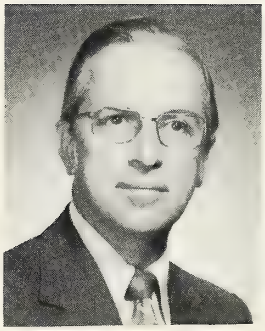
The sixth recommendation reads, "The Washtenaw County Medical Society should actively involve itself in the planning of medical care for the community . . . as the only organized voice of the physicians in this community it must be prepared to be of assistance to the people of Washtenaw County in the development of health care resources."

"The immediate benefit has been the renegotiation of the agreement," says Doctor Carron. "But the much greater benefit has been moving the county society forward."

On the basis of this move, the county medical society will sponsor an all-day workshop Oct. 11 for all persons involved in health delivery in the county, to discuss their concepts for the delivery of health care in Washtenaw County during the next decade.

"I don't know how this meeting will come out; I'm afraid it may blow apart," says Doctor Carron. "But the point is that this county society is actively becoming involved. It will be listened to.

We must unify our profession



John J. Coury, MD
MSMS President

Accepting the presidency of over 8,000 highly educated, highly motivated, intelligent, independent physicians of the State of Michigan is an awesome and almost frightening responsibility.

No matter how active and concerned one might be, the responsibility and demands of such an honored and respected position are indeed sobering.

To all of you—black and white, old and young, solo and group, academia and private—I pledge you my energies to my new office.

The responsibilities are many.

However, to me, the most pressing responsibility is to unify our profession. There is unnecessary polarization of academia and private; young and old; black and white; general medicine and specialization.

Our goal is a common one—to provide the best medicine possible to our patients!

To do this, we *must* have a strongly organized and unified medical profession.

One hospital, one university, one group, or one individual cannot deliver the goal to the public in a fragmented fashion.

A strongly organized, democratic, concerned medical society—local, state and national—is an absolute necessity if the quality of health care is to remain and improve. History has taught us this! However, in our fast growing, fast moving, almost impersonal environment—physicians are forgetting what history has taught them.

Irresponsible critics are attempting to undermine our foundation—and to some extent have succeeded. Unfortunately, too many of our colleagues are willing to listen to the irresponsible.

Responsible critics have made us stronger in aiding us to correct our deficiencies. This we accept with thanks.

It is my purpose during my tenure to meet with as many of you as possible—members and nonmembers; contented and discontented—in an attempt to unify and improve an already great profession. I want to get the uninvolved, involved and the involved, more involved.

Every member of our profession—no matter what his or her position in the medical world—should be an active member of organized medicine!

We need the input from all of you!

Will you help me in my task?

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Publication of **Michigan Medicine** is under the direction of the Publication Committee, Michigan State Medical Society. The scientific editor is responsible for the scientific content. The managing editor is responsible for the production, correspondence and contents of the journal. He and the executive editor share final responsibility of the entire publication.

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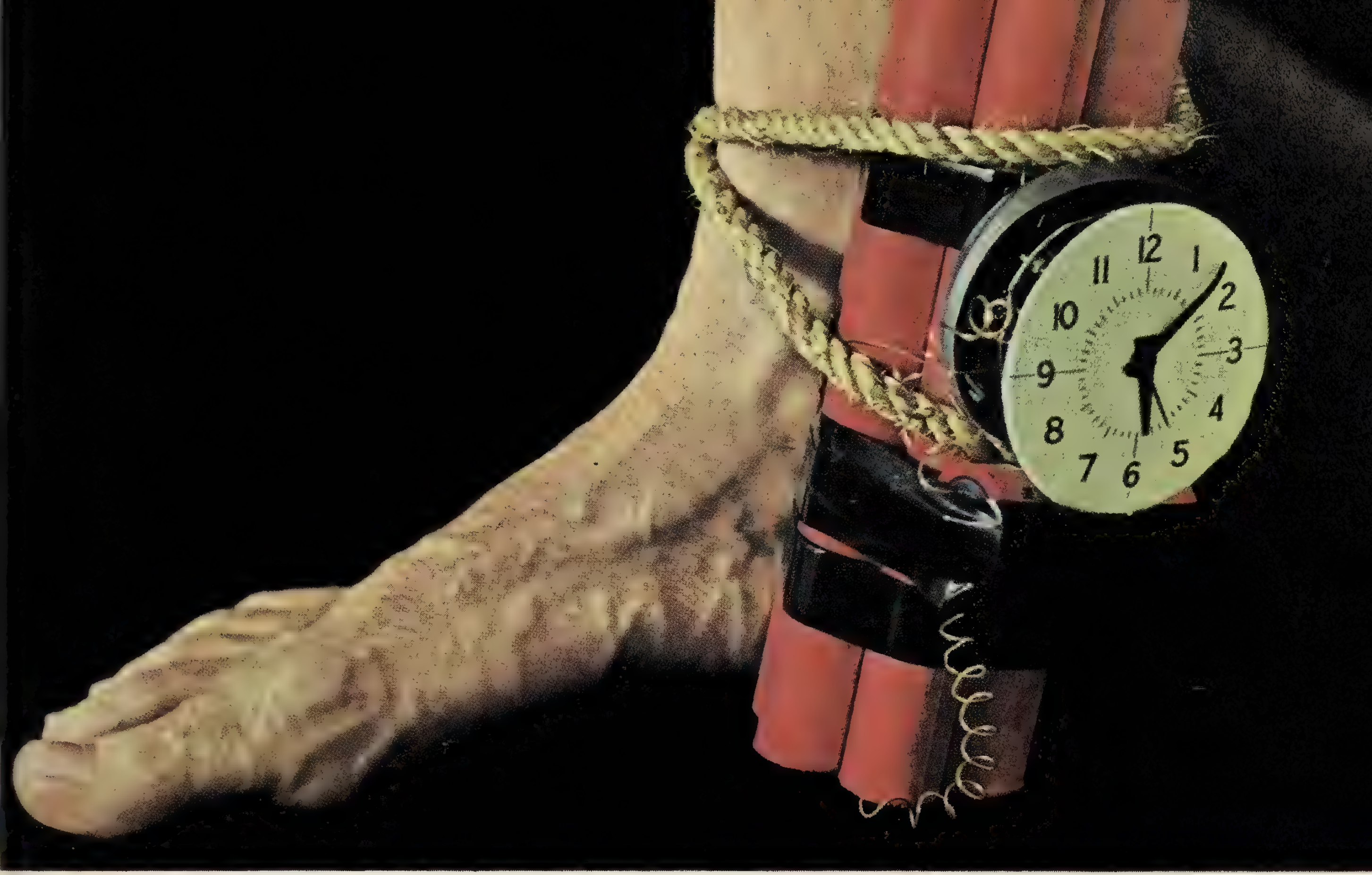

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tablets of 100 mg.

Important Note: This drug is not a simple analgesic. Do not administer casually. Carefully evaluate patients before starting treatment and keep them under close supervision. Obtain a detailed history, and complete physical and laboratory examination (complete hemogram, urinalysis, etc.) before prescribing and at frequent intervals thereafter. Carefully select patients, avoiding those responsive to routine measures, contraindicated patients or those who cannot be observed frequently. Warn patients not to exceed recommended dosage. Short-term relief of severe symptoms with the smallest possible dosage is the goal of therapy. Dosage should be taken with meals or a full glass of milk. Patients should discontinue the drug and report immediately any sign of: fever, sore throat, oral lesions (symptoms of blood dyscrasia); dyspepsia, epigastric pain, symptoms of anemia, black or tarry stools or other evidence of intestinal ulceration or hemorrhage, skin reactions, significant weight gain or edema. A one-week trial period is adequate. Discontinue in the absence of a favorable response. Restrict treatment periods to one week in patients over sixty.
Indications: Acute gouty arthritis, rheumatoid arthritis, rheumatoid spondylitis.
Contraindications: Children 14 years or less; senile patients; history or symptoms of G.I. inflammation or ulceration including severe, recurrent or persistent dyspepsia; history or presence of drug allergy; blood dyscrasias; renal, hepatic or cardiac dysfunction; hypertension; thyroid disease; systemic edema; stomatitis and salivary gland enlargement due to the drug; polymyalgia rheumatica and temporal arteritis; patients receiving other potent chemotherapeutic agents, or long-term anticoagulant therapy.
Warnings: Age, weight, dosage, duration of therapy, existence of concomitant diseases, and concurrent potent chemotherapy affect incidence of toxic reactions. Carefully instruct and observe the individual patient, especially the aging (forty years and over) who have increased susceptibility to the toxicity of the drug. Use lowest effective dosage. Weigh initially unpredictable benefits against potential risk of severe, even fatal, reactions. The disease condition itself is unaltered by the drug. Use with caution in first trimester of pregnancy and in nursing mothers. Drug may appear in cord blood and breast milk. Serious, even fatal, blood dyscrasias, including aplastic anemia, may occur suddenly despite regular hemograms, and may become manifest days or weeks after cessation of drug. Any significant change in total white count, relative decrease in granulocytes, appearance of immature forms, or fall in hematocrit should signal immediate cessation of therapy and complete hematologic investigation. Unexplained bleeding involving CNS, adrenals, and G.I. tract has occurred. The drug may potentiate action of insulin, sulfonylurea, and sulfonamide-type agents. Carefully observe patients taking these agents. Nontoxic and toxic goiters and myxedema have been reported (the drug reduces iodine uptake by the thyroid). Blurred vision can be a significant toxic symptom worthy of a complete ophthalmological examination. Swelling of ankles or face in patients under sixty may be prevented by reducing dosage. If edema occurs in patients over sixty, discontinue drug.
Precautions: The following should be accomplished at regular intervals: Careful detailed history for disease being treated and detection of earliest signs of adverse reactions; complete physical examination including check of patient's weight; complete weekly (especially for the aging) or an every two week blood check; pertinent laboratory studies. Caution patients about participating in activity requiring alertness and coordination, as driving a car, etc. Cases of leukemia have been reported in patients with a history of short- and long-term therapy. The majority of these patients were over forty. Remember that arthritic-type pains can be the presenting symptom of leukemia.
Adverse Reactions: This is a potent drug; its misuse can lead to serious results. Review detailed information before beginning therapy. Ulcerative esophagitis, acute and reactivated gastric and duodenal ulcer with perforation and hemorrhage, ulceration and perforation of large bowel, occult G.I. bleeding with anemia, gastritis, epigastric pain, hematemesis, dyspepsia, nausea, vomiting and diarrhea, abdominal distention, agranulocytosis, aplastic anemia, hemolytic anemia, anemia due to blood loss including occult G.I. bleeding, thrombocytopenia, pancytopenia, leukemia, leukopenia, bone marrow depression, sodium and chloride retention, water retention and edema, plasma dilution, respiratory alkalosis, metabolic acidosis, fatal and nonfatal hepatitis (cholestasis may or may not be prominent), petechiae, purpura without thrombocytopenia, toxic pruritus, erythema nodosum, erythema multiforme, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), exfoliative dermatitis, serum sickness, hypersensitivity angiitis (polyarteritis), anaphylactic shock, urticaria, arthralgia, fever, rashes (all allergic reactions require prompt and permanent withdrawal of the drug), proteinuria, hematuria, oliguria, anuria, renal failure with azotemia, glomerulonephritis, acute tubular necrosis, nephrotic syndrome, bilateral renal cortical necrosis, renal stones, ureteral obstruction with uric acid crystals due to uricosuric action of drug, impaired renal function, cardiac decompensation, hypertension, pericarditis, diffuse interstitial myocarditis with muscle necrosis, perivascular granulomata, aggravation of temporal arteritis in patients with polymyalgia rheumatica, optic neuritis, blurred vision, retinal hemorrhage, toxic amblyopia, retinal detachment, hearing loss, hyperglycemia, thyroid hyperplasia, toxic goiter association of hyperthyroidism and hypothyroidism (causal relationship not established), agitation, confusional states, lethargy; CNS reactions associated with overdosage, including convulsions, euphoria, psychosis, depression, headaches, hallucinations, giddiness, vertigo, coma, hyperventilation, insomnia; ulcerative stomatitis, salivary gland enlargement.
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For complete details, including dosage, please see full prescribing information.

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- **Not subject to narcotic controls:** convenient to prescribe—day or night—even by phone.
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50 mg. Tablets

Talwin®

brand of

pentazocine (as hydrochloride)

the long-range analgesic

a new outlook in chronic pain

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Warnings: *Head Injury and Increased Intracranial Pressure.* The respiratory depressant effects of Talwin and its potential for elevating cerebrospinal fluid pressure may be markedly exaggerated in the presence of head injury, other intracranial lesions, or a preexisting increase in intracranial pressure. Furthermore, Talwin can produce effects which may obscure the clinical course of patients with head injuries. In such patients, Talwin must be used with extreme caution and only if its use is deemed essential.

Usage in Pregnancy. Safe use of Talwin during pregnancy (other than labor) has not been established. Animal reproduction studies have not demonstrated teratogenic or embryotoxic effects. However, Talwin should be administered to pregnant patients (other than labor) only when, in the judgment of the physician, the potential benefits outweigh the possible hazards. Patients receiving Talwin during labor have experienced no adverse effects other than those that occur with commonly used analgesics. Talwin should be used with caution in women delivering premature infants.

Drug Dependence. There have been instances of psychological and physical dependence on parenteral Talwin in patients with a history of drug abuse and, rarely, in patients without such a history. Abrupt discontinuance following the extended use of parenteral Talwin has resulted in withdrawal symptoms. There have been a few reports of dependence and of withdrawal symptoms with orally administered Talwin. Patients with a history of drug dependence should be under close supervision while receiving Talwin orally.

In prescribing Talwin for chronic use, the physician should take precautions to avoid increases in dose by the patient and to prevent the use of the drug in anticipation of pain rather than for the relief of pain.

Acute CNS Manifestations. Patients receiving therapeutic doses of Talwin have experienced, in rare instances, hallucinations (usually visual), disorientation, and confusion which have cleared spontaneously within a period of hours. The mechanism of this reaction is not known. Such patients should be very closely observed and vital signs checked. If the drug is reinstituted it should be done with caution since the acute CNS manifestations may recur.

Usage in Children. Because clinical experience in children under 12 years of age is limited, administration of Talwin in this age group is not recommended.

Ambulatory Patients. Since sedation, dizziness, and occasional euphoria have been noted, ambulatory patients should be warned not to operate machinery, drive cars, or unnecessarily expose themselves to hazards.

Precautions: *Certain Respiratory Conditions.* Although respiratory depression has rarely been reported after oral administration of Talwin, the drug should be administered with caution to patients with respiratory depression from any cause, severe bronchial asthma and other obstructive respiratory conditions, or cyanosis.

Impaired Renal or Hepatic Function. Decreased metabolism of the drug by the liver in extensive liver disease may predispose to accentuation of side effects. Although laboratory tests have not indicated that Talwin causes or increases renal or hepatic impairment, the drug should be administered with caution to patients with such impairment.

Myocardial Infarction. As with all drugs, Talwin should be used with caution in patients with myocardial infarction who have nausea or vomiting.

Biliary Surgery. Until further experience is gained with the effects of Talwin on the sphincter of Oddi, the drug should be used with caution in patients about to undergo surgery of the biliary tract.

Patients Receiving Narcotics. Talwin is a mild narcotic antagonist. Some patients previously receiving narcotics have experienced mild withdrawal symptoms after receiving Talwin.

CNS Effect. Caution should be used when Talwin is administered to patients prone to seizures; seizures have occurred in a few such patients in association with the use of Talwin although no cause and effect relationship has been established.

Adverse Reactions: Reactions reported after oral administration of Talwin include *gastrointestinal:* nausea, vomiting; infrequently constipation; and rarely abdominal distress, anorexia, diarrhea. *CNS effects:* dizziness, lightheadedness, sedation, euphoria, headache; infrequently weakness, disturbed dreams, insomnia, syncope, visual blurring and focusing difficulty, hallucinations (see *Acute CNS Manifestations* under WARNINGS); and rarely tremor, irritability, excitement, tinnitus. *Autonomic:* sweating; infrequently flushing; and rarely chills. *Allergic:* infrequently rash; and rarely urticaria, edema of the face. *Cardiovascular:* infrequently decrease in blood pressure, tachycardia. *Other:* rarely respiratory depression, urinary retention.

Dosage and Administration: *Adults.* The usual initial adult dose is 1 tablet (50 mg.) every three or four hours. This may be increased to 2 tablets (100 mg.) when needed. Total daily dosage should not exceed 600 mg.

When antiinflammatory or antipyretic effects are desired in addition to analgesia, aspirin can be administered concomitantly with Talwin.

Children Under 12 Years of Age. Since clinical experience in children under 12 years of age is limited, administration of Talwin in this age group is not recommended.

Duration of Therapy. Patients with chronic pain who have received Talwin orally for prolonged periods have not experienced withdrawal symptoms even when administration was abruptly discontinued (see WARNINGS). No tolerance to the analgesic effect has been observed. Laboratory tests of blood and urine and of liver and kidney function have revealed no significant abnormalities after prolonged administration of Talwin.

Overdosage: *Manifestations.* Clinical experience with Talwin overdosage has been insufficient to define the signs of this condition.

Treatment. Oxygen, intravenous fluids, vasopressors, and other supportive measures should be employed as indicated. Assisted or controlled ventilation should also be considered. Although nalorphine and levallorphan are *not* effective antidotes for respiratory depression due to overdosage or unusual sensitivity to Talwin, parenteral naloxone (Narcan®, available through Endo Laboratories) is a specific and effective antagonist. If naloxone is not available, parenteral administration of the analeptic, methylphenidate (Ritalin®), may be of value if respiratory depression occurs.

Talwin is not subject to narcotic controls.

How Supplied: Tablets, peach color, scored. Each tablet contains Talwin (brand of pentazocine) as hydrochloride equivalent to 50 mg. base. Bottles of 100.

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Welcome

Members of the Michigan State Medical Society join in welcoming the following new members into a progressive state medical organization. MSMS is dedicated to promoting the science and art of medicine, the protection of the public health, and the betterment of the medical profession. Each new member is encouraged to join with other MSMS members at both the local and the state levels in achieving these goals.

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(Continued on Page 846)

MAFP to take any necessary means to end discrimination

The Michigan Academy of Family Physicians board recently was authorized at the MAFP annual meeting "to use whatever means possible including legal action to prevent third-party payors from discriminating against family physicians."

The convention delegates "authorized an assessment up to $25 per member to institute such legal action when it is deemed advisable by the board." MAFP in 1971 adopted a resolution to obtain "identical fee for identical service." The recent resolution indicated that "time is fast drawing to an end that meaningful dialogue can be maintained."

In discussing the equal-fee issue, new MAFP President Robert Vitu, MD, said the "dual standard of payment for identical services is unwarranted, illogical and discriminatory."

Doctor Vitu also promised that the MAFP will continue its efforts to explore joint MD-DO continuing medical education.

Retiring President Joseph V. Fisher, MD, described liaison work with the medical schools and students and postgraduate educational efforts. He praised the MAFP Legislative and Public Policy Committee for its first legislative seminar in Lansing. He rated it a "successful educational experience," and "an avenue for improving our communications and relations in Lansing."

Louis R. Zako, MD, was advanced from speaker of the MAFP to president-elect to succeed Doctor Vitu in 1973. Cecelia F. Hissong, MD, former secretary, was advanced to speaker, and Charles R. Zimont, MD, was returned as vice-speaker. The meeting was held at Boyne Highlands.

In the legislative arena, one resolution urged the House of Representatives to select members for the "Joint Committee of the General Practice of Medicine," so work can proceed. Another resolution directed the MAFP to increase dialogue with the state superintendent of public education and the directors of the state departments of health and mental health.

Resolutions were approved also to encourage research among family physicians, and to alert doctors to the new requirements of safety bottle caps.

WELCOME/Continued

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Scientific papers

A modified technique of urethrovesical suspension for urinary stress incontinence

By Morton R. Lazar, MD, FACS
Eugene A. Snider, MD, FACS
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Detroit

Abstract

An improved technic for correction of stress incontinence is presented in which a new instrument and its use is described. The technic involves placement of three paraurethral chromic sutures under direct vision for elevation of the urethrovescial angle.

Introduction

Stress incontinence, or the involuntary escape of urine from the bladder during strain, is one of the most troublesome problems in the practice of gynecology. Many corrective procedures have been devised, some very extensive, others relatively simple.

Every gynecologist has his favorite procedure, but none have produced perfect results. Consequently, physicians will continue to strive to devise variable procedures in an effort to improve their results.

In 1959, Pereyra reported a simplified method for the correction of stress incontinence.[1] He devised a special cannula which has a partly hollow shaft angulated near the pointed end and carries a stylet that protrudes through the opening at the angle of the shaft. Both pointed ends are provided with an eye for carrying a suture threaded into the vagina and out through the abdominal wound. With this technic the supports are neither passed under nor attached to the urethra. Instead, the paraurethral tissues are elevated by parallel slings placed on each side of the urethra and passed retropubically to be attached to the abdominal fascia.

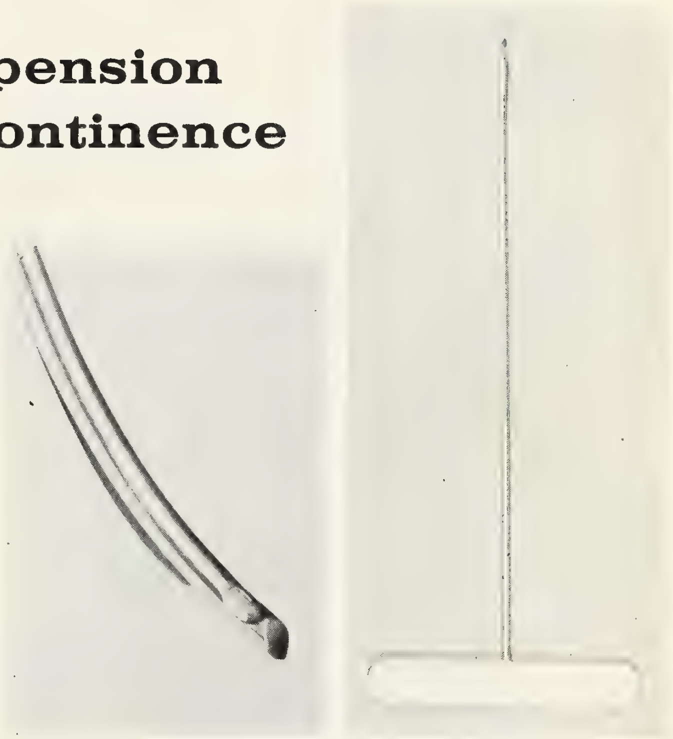


Fig. 1

This report summarizes a refinement in this technique and describes our special instrument which is used as an introducer to place the paraurethral sutures.

Instruments

A. Our suprapubic introducer (Fig. 1) is shaped to conform to the angulation of the vagina, urethra and pubic symphysis. The instrument is solid, surgical stainless steel and cannot be broken or fragmented.

B. Our modification of the Guyon sound previously described,[2] is employed for the suprapubic cystostomy.

The authors are affiliated with the Departments of Gynecology and Obstetrics of Wayne State University School of Medicine, and Harper and Sinai Hospitals of Detroit.

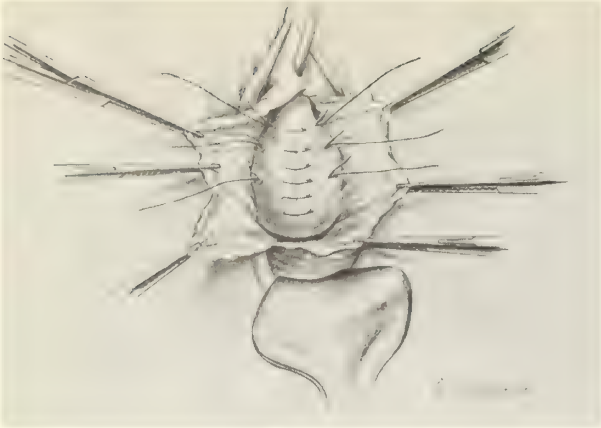


Fig. 2

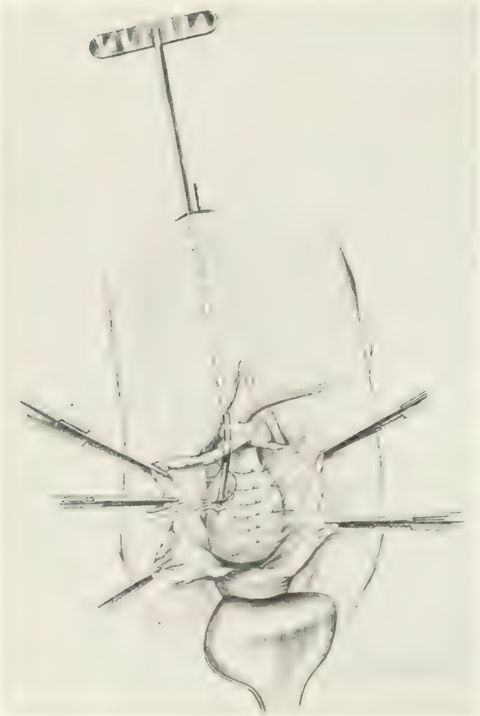


Fig. 3

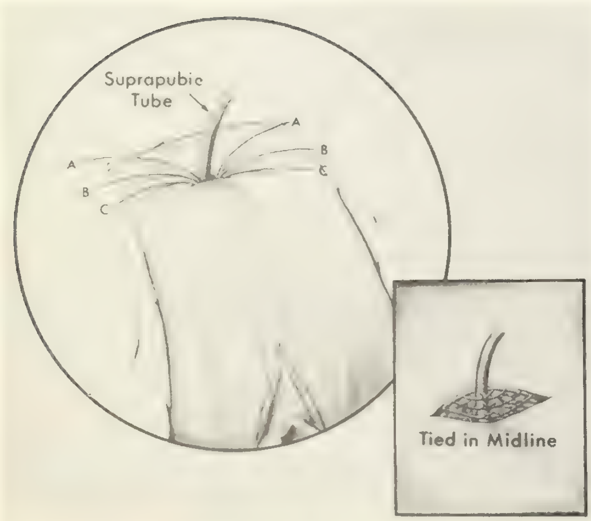


Fig. 4

Method

A. In all patients, the senior author's infiltration technique is utilized to facilitate dissection and markedly decrease blood loss.[3,4] Vaginal hysterectomy, if indicated, is accomplished and the anterior bladder fascia is dissected, freeing the paraurethral tissue laterally to the pubic rami. The anterior dissection is carried within one centimeter of the external urethral meatus, and to the apex of the vagina.

B. An #18 Foley catheter with a 5 cc bag is inserted to demarcate the vesical neck. Paraurethral sutures, if necessary, are inserted to reduce any urethrocoele, if present. The cystocoele is now imbricated prior to elevation of the urethrovesical angle.

C. Generally, three Chromic #1 catgut sutures are now placed laterally starting at the upper lateral border of the vesical neck. **(Fig. 2)** Sufficient tissue is included in each bite and the knot is tied firmly. The free end of the tie is cut about one centimeter from the knot to prevent slipping. The needles are allowed to remain attached after the placement of the three sutures.

D. The previously prepared suprapubic area is now exposed and a four centimeter incision is made about three centimeters above the pubic symphysis. The special introducer is now inserted in a downward lateral direction along the posterior border of the symphysis pubis. The operator's free hand is held with the index finger placed in the paraurethral space protecting the urethra while the assistant pulls the foley catheter to the opposite side. When the point of the introducer appears in this area, it is felt with ease and guided through the paraurethral tissue to appear laterally. **(Fig. 3)** The previously placed sutures on this side are threaded through the eye of the instrument, and, after cutting off the needles, the introducer is withdrawn carrying with it the three sutures through the suprapubic incision. This step is repeated on the opposite side.

E. Prior to tieing the sutures, the modified Guyon sound is used to insert the suprapubic drainage catheter transvesically through the same incision, using a #20 Foley catheter. After this is placed, each suture is tied to its opposite suture across the rectus fascia below the suprapubic tube. **(Fig. 4)** The suprapubic incision is now closed with interrupted silk sutures. The vaginal mucosa is then closed in the usual manner with interrupted chromic sutures. If necessary, the rectocele and/or enterocele is then repaired.

Results

Thirty-eight repairs for stress incontinence have been performed by the authors during the past three years.

It is difficult to be definitive regarding the results since the longest interval of operation is three years. However, all failures were evident within the first year. The number and length of time these patients have been followed gives us an adequate clinical evaluation. Of the total done, 35 are continent. The three that have failed have been those that have been operated upon two and three times previously, unsuccessfully. The primary repairs are continent.

Discussion

This combined surgical procedure enables the gynecologist to correct stress incontinence more definitively in one sitting. Previously, patients were subjected to a second operation which usually was an abdominal approach such as a sling operation or Marshall-Marchetti-Krantz procedure.[5]

It has been our experience that only 75% of the anterior repairs will have permanent cures of their incontinence, and these are usually of the mild variety. Those patients with a chronic cough or asthma are particularly prone to recurrence from either a simple anterior repair or Marshall-Marchetti procedure, and it is our opinion that such patients will especially benefit from the combined procedure. This idea was emphasized by Dr. T. Ball in his treatise on stress incontinence.[6] This procedure obviates the necessity of a secondary operation at a later date.

The advantage of this procedure is that with this technic, the sutures are placed under direct vision directly into the area that requires elevation. It is no longer necessary to attempt to elevate the paraurethral area blindly through an abdominal incision.

Chromic catgut sutures are used in preference to nonabsorbable sutures. Our early cases were done with Tevdek and silk with resultant stone formation in the bladder. Following this complication, all nonabsorbable sutures such as Tevdek, silk and Merselene were abandoned with consequent improvement in the complication rate.

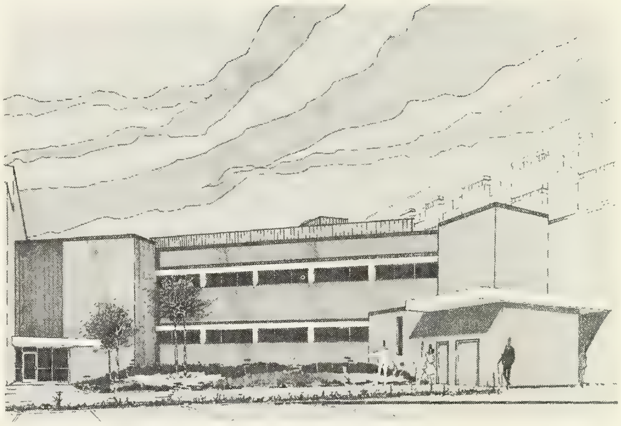
Summary

(1) A new instrument has been created by the authors to simplify the suprapubic paraurethral urethrovesical suspension operation.
(2) The details of the operation technic have been described.
(3) The advantages of this approach are outlined.

Bibliography

1. Pereyra, A.J. A Simplified Surgical Procedure for the Correction of Stress Incontinence in Women. *Western J. Surg. Obstet., Gynec.,* 67:223-226, 1959.
2. Lazar, M.R. and Snider, E.A. Suprapubic Cystostomy in Gynecologic Surgery. *Mich. Med.* 68:341-343, 1969.
3. Lazar, M.R., Ottaway, J.P., and Offen, J.A. Controlled Blood Loss in Vaginal Surgery. *Obstet., Gynec.* 10:198-201, 1957.
4. Lazar, M.R. and Krieger, H.A. Blood Loss in Vaginal Surgery: A Comparative Study. *Obstet., Gynec.* 13:707-710, 1959.
5. Marshall, V.E., Marchetti, A.A. and Krantz, K.E. The Correction of Stress Incontinence by Simple Vesicourethal Suspension. *Surg. Gynec., Obstet.* 88: 509-518, 1949.
6. Ball, T.L. Combined Vaginal and Abdominal Plication and Cystopexy for Urinary Stress Incontinence. *Amer. J. Obstet., Gynec.* 63:1245-1253, 1952.

Appreciation is expressed to T. N. Evans, MD, and A. I. Sherman, MD, for their kind assistance and encouragement in preparation of this paper.



The Holden Perinatal Research Laboratories at the University of Michigan Medical Center are officially opened for their work in saving the lives and health of mothers and their premature or critically ill infants in high-risk categories. The laboratories, a regional facility and the only ones in Michigan, opened Sept. 1. The laboratories were made possible by a $1.5 million gift from the Holden Fund of Detroit. They are attached to both the Mott Children's Hospital and the Women's Hospital.

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(Further information may be obtained from Robert K. Richards, program manager, the U-M Department of Postgraduate Medicine, Ann Arbor, 48104.)

Compulsory medical treatment in Michigan — the law and the practice

By James D. Adams
Jackson

Everyone has been vaccinated . . . Mumps, measles, chicken pox, influenza, ringworm are all simple diseases . . . Plague, polio, smallpox, tuberculosis - no one worries about these diseases anymore. They are pretty much obsolete.

The foregoing statements seem to represent the general public opinion about some of the more and less common contagious illnesses which afflict human beings.[1] It is taken for granted that most people are vaccinated when young, that the common childhood diseases are only childhood diseases, and that such virulent diseases as plague, smallpox and poliomyelitis are things of the past which no longer concern modern American society.[2]

Yet there is a large number of people in Michigan (to which this paper is limited) concerned about these and other "dangerous and communicable" diseases.[3] This includes the Michigan Department of Health, the Michigan legislature, local county, city, and township boards of health, doctors, nurses, hospitals, teachers and school principals, and health officers. Indeed, the laws of the state of Michigan are very elaborate in ensuring the continued concern of these people. It is the purpose of this paper to set out, in general, the nature of these laws, and to compare them, by way of a small sampling, with the realities of medical practice in Michigan.

The paper does not attempt to discuss the merits of the law of compulsory medical treatment in Michigan, either from the constitutional standpoint, or from the moral standpoint. The evaluation at the conclusion of the paper deals only with the writer's opinion as to the practical value of such law. Otherwise, this is merely an attempt to point out the length to which the law has gone in this area, and to test whether those lengths are being reached in actual practice.

The substantive law is taken from the statutes of the state of Michigan, from Section 325 of the Michigan Administrative Code of 1954 entitled "Public Health Code," and from pertinent cases. Information relative to the realities of practice was obtained from a small, random-sample questionnaire mailed to physicians in the southern lower peninsula of Michigan.[4]

Essentially, there is a considerable overlap in the law of compulsory medical treatment in Michigan, as between the statutes and the Michigan Administrative Code of 1954 (MAC). The statutes are quite specific with regard to some areas, and very general with regard to others. MAC is probably more detailed and certainly better organized. MAC sets out all of the rules of compulsory medical treatment, both as contained in the statutes, and as promulgated from time to time by the Michigan Department of Health. Although it is not specifically stated anywhere, it is a fair assumption that since the Department of Health is a creature of statute, and gets its rule-making authority by statute,[5] all rules promulgated must conform to statutory parallels; that is, they must not contradict any statutory provisions although they may certainly be in excess of them, and are in many cases.

The Substantive Law

According to MAC, there are two general classifications of disease which are dealt with in the nature of our subject. On the one hand there are those diseases which are designated as "dangerous, communicable diseases"[6] and must be reported to the state Department of Health. On the other hand are those diseases which are reportable, even though not designated as "dangerous, communicable diseases."[7] At the risk of boring the reader, the following lists represent, as of November, 1971, the two classifications:

I. *Reportable Diseases - Nondangerous and Noncommunicable*

Actinomycosis
Hookworm
Anthrax
Blastomycosis
Botulism
Chicken pox
Dengue
Diarrhea (Infants
  1 year and under)
Diarrhea (Infants
  1 month and less)
Amoebic Dysentery
Baccillary Dysentery
Encephalitis
Epidemic
  Keratoconjunctivitis
Erysipelas
Favus
Typhoid Carriers
Glanders
Impetigo
Infectious Jaundice
Infectious Mononucleosis
Influenza
Influenzal Meningitis
Meningococcic Infections
Occupational Diseases
Ophthalmic Neonatorum
Paratyphoid A & B
Pediculosis
Pink Eye
Pneumonia

This article was written while the author was a senior law student at The University of Michigan. He is now with the law offices of Parker and Stapley, Jackson.

Psittacosis
Puerpal Streptococcic Infections
Rabies
Acute Rheumatic Fever
Ringworm
Rocky Mountain Spotted Fever
Rubella
Salmonella Infections
Scabies
Scarlet Fever
Acute Streptococcic Sore Throat
Tetanus
Trachoma
Trichinosis
Tularemia
Undulant Fever

It may be noted that although some of these are contagious in the true sense, the Health Department seems to feel that the danger of communication is small enough to permit physicians to treat them as a matter of course, without any specific legal requirements other than the reporting.

II. *Dangerous Communicable Diseases - Reportable*

Chancroid
Cholera
Diphtheria
Diphtheria Carriers
Gonorrhea
Granuloma Inguinale
Leprosy
Lymphogranuloma Venereum
Malaria
Measles (distinct from Rubella)
Meningitis (Meningococcic)
Mumps
Neonatal Diarrhea of the Newborn
Pertussis
Plague
Poliomyelitis
Smallpox
Syphilis
Tuberculosis
Typhoid
Typhoid and other Salmonella Choleocystitis
Typhus
Yellow Fever

Of the twenty-four "dangerous communicable diseases," five of them are venereal diseases, three are childhood diseases, 10 are generally considered as well-controlled, and the rest are seldom known to anyone but physicians. Indeed, leprosy is often spoken of as not contagious at all.

Although the basis for separating the two classes of diseases is not made clear, it seems to be done on the grounds of potential for epidemic, and amenability to compulsory treatment. In other words, those diseases which are virulent and may reach epidemic proportions with relative ease are classified as "dangerous communicable diseases," and are thus made the subjects of specific statutory and administrative regulation as to handling and treatment.

The power to deal with dangerous communicable disease is vested in a broad spectrum of entities. At the top is the Michigan Department of Health and the Director of Public Health.[8] It is the function of the Director and the Department to promulgate rules and regulations of public health, to act as the state coordinating agency of health control and information, and to be the central agency for the reporting of disease. Next, in descending order, are the county, city, and township health boards.[9] It is this level of health authority which has the most direct responsibility for dealing with compulsory medical treatment, as will appear more fully below. Pursuant to Rule 325.1 of MAC, local boards of health may make such rules and regulations as are necessary within their jurisdiction, even in excess of state Health Department requirements, so long as they are neither less stringent nor in contradiction thereof. It has been held, in fact, that township boards of health have large discretionary powers, the exercise of which will not be interfered with until a clear case of abuse is made out. It is presumed, lacking a contrary showing, that such local boards are acting with propriety and in good faith.[10] Finally, power to deal with dangerous communicable disease is vested, in varying degrees, in private physicians,[11] nurses,[12] public health officers,[13] even school principals and teachers.[14] The detail as to how much power is available to each of these entities, and how it may be utilized, is explored in a subsequent section.

There are four basic methods, whether individually or in combination, of compulsorily dealing with "dangerous, communicable diseases." Some of these are mandatory and some are discretionary, but the common factor is that they may all be utilized in compulsory fashion, without the consent and over the objection of the diseased person, with the full backing of the law.

A. Reporting

Although the reporting of disease, whether "dangerous and communicable" or otherwise merely reportable under MAC Rule 325.2 is not a method of compulsory disease treatment, it is part and parcel of the law of compulsory treatment in that it often is required over the patient's objection, and constitutes a valid exception to the doctor-patient privilege. Indeed, Rule 325.1 of MAC provides that:

> Cases and suspects of reportable diseases SHALL be reported immediately to the local health officer. Court decision has interpreted the word 'immediately'—to mean 'within the following 24 hours.'[15]

Rule 325.53, directed at the reporting of venereal disease, specifically takes such disease outside the doctor-patient privilege, and makes it a misdemeanor for a physician to fail to report within 24 hours. And, while other diseases are not so directly dealt with in respect of penalties for failure to report, there is a general provision for a 90 day jail sentence and a $100 fine for any person found guilty of violating a township board of health rule or by-law.[16] Thus, any reporting rules set up locally, or by the state Department of Health (by implication), are binding on all physicians, and such information as is called for is outside the doctor-patient privilege notwithstanding the lack of a specific statute to that effect.

These reporting requirements frequently go beyond the initial contact with the disease, especially with regard to venereal disease. The regulations under Rule 325.53 of MAC require a physician not only to report the initial contact with venereal disease, but to make all reasonable efforts to ascertain the identity and whereabouts of others who may have, or may have been exposed to, the disease. Lack of cooperation by the patient is reportable.[17] Further, if a venereal disease patient discontinues treatment, of his own volition, without good cause (which is undefined), such actions must be reported by the physician.[18] If a venereal disease patient relocates his residence, presumably outside the treating physician's area, that also must be reported, within 5 days, BY THE PHYSICIAN![19] Similar reporting requirements apply to typhoid carriers,[20] except the patient rather than the physician is responsible. Other diseases, depending on their seriousness, carry variably less stringent reporting regulations.

B. Quarantine

In the not too distant past, quarantine and placarding were common as a control device. And, while they are not very visible in 1971, the provisions remain in the law, and can, if imposed, work very substantial hardship on the quarantined individual and those around him. Along with the quarantine rules go those rules applicable to the disposition of people and property suspected of being, or found to be, diseased.

Quarantine decisions are generally left to the discretion of township health boards (which may or may not be composed of medically trained personnel), health officers, and physicians. When, in the township health board's opinion, a person *may* be a cause of sickness, or property *may* be injurious to the health of local residents, such person may be removed[21] or isolated,[22] others around him may be forced to evacuate the area,[23] and such property may be destroyed.[24] The expenses attendant to such action are properly allocated to the diseased person himself, or, in the case of property, to the owner.[25]

The pervasiveness of a township health officer's power in this regard is almost as great as that of the health board. Indeed, even without the instructions of the local board, and either on the basis of reliable information or a good faith belief, a township health officer is empowered to isolate the diseased or suspect individual, order the vaccination of other area residents, isolate others if they have been exposed, prevent exposed children from attending school, order and supervise funeral procedures, and destroy property—all on his own motion.[26] It is to be doubted whether a single health officer would ordinarily shoulder this much responsibility on his own, but the power to do so does exist.[27]

So explicit are the rules on isolation and quarantine that, in certain cases, they extend to the handling of deceased persons, notwithstanding the objections or wishes of kin. Under MAC 327.17, persons who die afflicted with diphtheria, meningococcic meningitis, plague, poliomyelitis, scarlet fever, or smallpox, cannot be moved from the place of death without a prescribed procedure of embalming. If they are to have a public funeral, such must be approved by the health authorities. And those who are under quarantine as a result of exposure to the decedent—generally the members of the immediate family—may only attend the funeral if transported by separate conveyance, isolated at the services, and returned immediately to the quarantine area. Apparently accompanying the deceased to the cemetery for interment is prohibited due to the public nature of the burial.

It might finally be noted that the Michigan Department of Health has the statutory power to declare the entire state to be in quarantine when it can be shown that dangerous communicable disease may be carried into or out of the state; and that the Governor may go so far as to order the state militia to enforce such quarantine by the use of martial law.[28]

C. Compulsory Treatment

This is probably the most questionable area of our subject, at least from a physician's standpoint. It is the writer's opinion that this is, at least theoretically, due to the fact that it often involves confinement of persons against their wishes, without a legal adjudication, and sometimes the forcible invasion of bodily integrity without the consent and over the objection of the patient.

While the power of compulsory treatment is mainly restricted to certain diseases by statute, it is not exclusively so restricted. As early as 1906, in *Halter v. Nebraska,* 205 U.S. 34, the United States Supreme Court held that, under its police power, a state may order medical care for the protection of its citizens.[29] Presumably, this power extends as far as the state, in the exercise of its discretion and falling short of arbitrariness and capriciousness, deems it necessary to go.

The specific Michigan statutes, pertinent to compulsory treatment, will be discussed only as to typhoid and venereal disease. There are, of course, others, but the statutes are most explicit in these areas, and further examination of other statutes would be repetitive for the most part.

With respect to typhoid, there are five designated classes of patients:

1. Incubatory—One who excretes typhoid organisms prior to the onset of typhoid;
2. Contact—One who excretes typhoid organisms without having clinically recognizable typhoid;
3. Actual typhoid victim;
4. Convalescent—One who excretes typhoid organisms during the first year after becoming afebrile;
5. Chronic—One who excretes typhoid organisms more than one year after a non-clinical typhoid infection.[30]

Categories 1, 2, 4, and 5 are "carriers," and, of course, a person in category 3 is as infectious as any carrier. Since all five categories are "dangerous and communicable," all are treated in the same way. Those persons who have or carry typhoid are not permitted to work 1) where food may be stored, prepared, or handled; 2) where eating utensils may be handled. They may not be around milk or other dairy products distributed commercially, nor may they come into contact with dairy animals or equipment.[31] Persons with or carrying typhoid may not utilize public laundries or toilet facilities, they may not move within or outside the state of Michigan without informing the state Health Department, and they may not travel without providing an itinerary to the Health Department.[32] Under other provisions, such persons are required to submit to such treatment and examination as may be required by the Health Department, and may be required to provide such excretory specimens as the Department deems necessary. Indeed, the disposition of excreta must be according to Health Department prescription, and the Director of Public Health may take such steps as he sees fit to ensure the authenticity of such specimens.[33]

Venereal disease, probably because of both its virulence and commonness, is even more carefully controlled. And authority for treatment is even more explicit. It should be noted that not only persons who actually have a diagnosed venereal disease, but those who, by laboratory tests or other competent medical diagnosis, are suspected of having venereal disease, are subject to statutory treatment.[34]

The treatment to be imposed varies with the communicable impact of the particular venereal disease under scrutiny. In the case of syphilis, MAC 325.53, Regulation 8, requires that "Early syphilis SHALL be treated with a minimum of 2.4 million units of penicillin," and doses can go as high as 6 million units. In the case of gonorrhea, a food handler must be completely cured before he may return to work.[35]

Should a person happen to be arrested (not convicted) for prostitution, he or she is required to undergo a physical examination for venereal disease.[36] Should disease be found, quarantine follows. And, should that person fail to follow the quarantine, he or she may be declared, *ex parte*, a menace to public health by the local health officer, and upon order of the probate court confined to a hospital.[37] Such confinement may continue until, in the opinion of the committing health officer, treatment has been effective.[38] Indeed, this treatment may go as far, whether in the case of an arrested prostitute or any other person, as an unconsented-to lumbar puncture, as a follow-up to broad-spectrum antibiotic treatment where the patient is intolerant of penicillin.[39]

Added to the above may be consideration of the "shot-gun" statutes and rules which give local and state health boards and officers the power to "make such rules as are necessary" to protect the citizenry. Coupled with the criminal penalties—next to be discussed—the possibilities for extensive mandatory medical treatment are myriad, and probably limited only by the extent of the dangers presented by the disease.

D. Criminal Penalties

It would be repetitive, and meaningless, to detail every criminal penalty available in the area of compulsory medical treatment. The statutes and administrative regulations overlap to a degree which renders any clear discussion overly abstruse. However, one might begin with the provision that any willful exposure of another to a "dangerous and communicable disease" is a misdemeanor.[40] Per Michigan Compiled Laws Annotated, Section 750.504, this would be subject to a 90-day jail sentence and a $100 fine. To this general provision may be added the following:

1) 90 days and $100 for violating a township health rule[41];
2) $100 for violation of local health rules respecting property capable of carrying contagion[42];
3) $100 for traveling from an infected area without a license when one is required by the local health officer[43];
4) 90 days and $100 for failure to comply with the health officer's rulings regarding isolation, quarantine, vaccination, disinfection, pursuant to MCLA, Section 325.151[44];
5) 6 months and $200 for violation of a regulation, rule, or order of the state Director of Public Health or the state Health Department[45];
6) 90 days and $100 for failure to report ve-

nereal disease within 24 hours of discovery[46];

7) 1 year and $250 for exposing or permitting an employee to expose food, to venereal disease[47];

8) 1 year and $500 for knowingly failing to report a fellow employee, or oneself, with venereal disease in a place where cigars are manufactured[48];

9) 5 years for willingly debauching the morals of one under 15 years of age and thereby communicating to him any venereal or other loathsome disease.[49]

The list could be doubled without repeating a penalty, but the point is clear. It should be noted, however, that for all the available criminal penalties, the cases are few and far between. This has led me to the conclusion that either the laws are not enforced, or there is little reason for them in any event. The response to the questionnaire indicates that some of the sparseness of cases is due to the former, but that the latter is the more probable reason.

The Actual Practice

The referenced questionnaire consisted of 32 questions, designed in such a manner as to test the general and specific knowledge of physicians respecting compulsory treatment. The full text of the questionnaire is set out in Appendix A, however the trend of answers will be summarized below. The questionnaire was divided into five general areas:

1) Familiarity with state and local health officials and where the law may be found;
2) Personal experience with mandatory treatment;
3) Methods of enforcement of medical orders;
4) Opinion with respect to the law of mandatory treatment;
5) Specific questions on the law pertinent to venereal disease.

75% of the physicians questioned responded. Considering the nature of the subject matter, I felt this was a better than average response. In the area of familiarity with state and local health law and officials, not one doctor was familiar with the Public Health Code. Only 33% did not know their local health officer and whether or not there was a township or city board of health in their area. Approximately 67%, however, admitted not knowing who the local board members were, or how to contact them. And, 50% admitted not knowing the rules and regulations of their local health boards.

Personal experience with mandatory treatment was even more revealing. Only 33% had ever treated a diseased person over his objection. Of this 33%, only one doctor cited legal authority for such treatment. Only one doctor had ever committed a diseased person to a hospital over objection, and he stated that he only discovered his power to do this by accident. Compulsory vaccination had only been done pursuant to orders in the armed services. Finally, all but one physician emphatically answered "no" to whether they would forcibly treat or otherwise deal with a diseased person, over his objection, solely on the authority of a properly identified township health officer.[50] And even the one doctor who stated that he would do so, was careful to say that he would check with his attorney before he undertook any forcible treatment.

In attempting to elicit personal methods of enforcing medical orders, little success was experienced. Only three respondents had ever had their medical orders violated to such an extent that they were moved to affirmative action. One reported the violation to the "Board of Health," and performed no further follow-up or action. Another did nothing since he did not know how to enforce his orders via the legal system, and had no time to do so in any event. The third performed sufficient follow-up to discover that the county health board had "picked up the patient and confined him." None of the three doctors filed criminal complaints for such violation of their orders although one said he would have, had the patient not cooperated. One failed to say why he did not file such a complaint, and the other admitted not knowing that the violation was criminally punishable.

Positive opinions as to the law of compulsory treatment were rare. Only one respondent agreed that mandatory smallpox vaccination should be eliminated on the ground that its dangers now outweigh the risk of not administering it. There were no affirmative suggestions or criticisms regarding whether the current list of "dangerous and communicable diseases" should be revised, notwithstanding the relative commonness and ease of treatment of many of them.

The questionnaire devoted eight questions specifically to venereal disease. This was done for two reasons. First, the provisions for mandatory treatment of venereal disease are among the most specific in the health laws of Michigan. Secondly, it is the writer's opinion that more physicians come into contact with venereal disease than any other single "dangerous and communicable disease." Thus, they would be more likely to be familiar with its legal aspects. Precisely the contrary was true. Only 40% indicated enforcement of treatment for venereal disease through threatened reporting of the violation. Another 40% stated that they always get patient cooperation, and 20% did not state whether they have had any experience either way in this regard. 80% knew that the failure to report venereal disease is a crime. Not one, however, was aware that there is a statutory regulation as to the minimum treatment for a venereally diseased person.[51] Only 50% were aware that it is a violation of the doctor-patient privilege to inform a minor's parents, over his objection, of the minor's venereal disease.[52] None were aware of whether failure to notify the parents is a crime or not. 50% indicated, however, that they require the parents' consent before treating a minor with venereal disease, and only 15% knew whether, legally, they needed such consent.[53]

Finally, one respondent, purporting to speak for "physicians in general," stated that physicians are unable to keep up with the frequent changes relative to the medico-legal field, and so always refer to the Department of Health for rulings. Indeed, all respondents opined that the average physician in their area had very little, if any, contact with compulsory medical treatment problems.

From the response to this questionnaire, small as it was in coverage, it is this writer's opinion that the law of compulsory medical treatment in Michigan, with all of its ramifications, needs a complete overhaul.

It is obvious to me that the laws are little known to most doctors, that they are relatively unenforced, and in many respects, unenforceable as a practical matter. Certainly, their necessity is to be doubted, at least their necessity with respect to the degree to which they now exist.

The health laws were promulgated, to a great extent, during years when much virulent disease was little understood and when treatment and facilities for confinement of diseased persons was, at best, poor.

In 1972, the general public is well aware of those diseases which present dangerous contagion. And even if they are not, they are sophisticated enough about sickness and doctors that they will consult their physician if they are seriously ill.

Treatment and facilities are commonly available, and, to a large degree, considered necessary by most. Quarantine has become a thing of the past, and is probably impractical today. Indeed, it is probably the rare person who would, knowingly, do anything other than what his doctor recommends.

With modern medical knowledge, the rarity of many "dangerous and communicable diseases," the general cooperation of the public, and the ease of access to the Board of Health in the case of a recalcitrant person, the law of compulsory medical treatment could, and should, be revised so that it is simple for any physician to understand and comply with.

Perhaps, as an example, doctors should only be required to report those diseases deemed necessary. Over and above that, the only requirement might be that a physician encountering those diseases shall inform the afflicted person and recommend the necessary treatment and/or institutionalization. In those cases where the patient refuses, and the physician deems such refusal to be a danger to the public health, he shall file a complaint with the county board of health, which shall investigate and act accordingly, having authority to deal with such recalcitrant in the manner deemed necessary to protect the public health. Such cases, if the record is to be believed, will be rare indeed.

Finally, it should be part of any physician's education to pursue at least a familiarity course in such law, and to be required, as part of the licensing procedure, to demonstrate a knowledge of it consistent with requirements set down by the Michigan Department of Health. Without this familiarization, whether of the existing law or any revision thereof, the existing plethora of rules and regulations are merely so much reading material.

References

1. General interviews with perhaps 25-50 different people during October-November, 1971.
2. This writer would suggest that those feelings and opinions are held because of the commonness of, and easy accessibility to, effective medical treatment.
3. Michigan Administrative Code of 1954 (MAC), Section 325.15.
4. The sample consisted of 40 questionnaires sent out and 25 returned. The questionnaire consisted of 32 questions going to the physician's knowledge of the laws—especially Section 325, MAC, to his actual practice with respect to situations which, under the law, call for compulsory treatment, and the attitude he holds toward the general area.
5. Michigan Statutes Annotated (MSA) Section 3.29 (245) et seq.
6. MAC, Section 325.15.
7. MAC, Section 325, Rule 325.2.
8. MSA 3.29 (245) et seq.
9. MSA 14.161 et seq., 14.61 et seq., and 14.110, respectively.
10. *Upjohn v. Richland Twp. Bd. of Health,* 46 Mich. 542, 9 N.W. 845, 41 Am. St. Rep. 178 (1881), and still good law.
11. See the various statutes and regulations authorizing reporting, quarantine, and compulsory treatment. Many of these are cited throughout the paper.

12. MSA 14.701 et seq.; 14.711 et seq.
13. MSA 14.141 et seq.
14. MAC, Rule 325.5.
15. Curiously, an examination of the cases fails to reveal the "court decision" to which the rule refers. However, since the State Health Department has the authority to make such a rule, the lack of supporting case law does not invalidate it.
16. Michigan Compiled Laws Annotated (MCLA), Section 327.3.
17. MAC, Rule 325.53, Regulation 3.
18. MAC, Rule 325.53, Regulation 5.
19. MAC, Rule 325.53, Regulation 6. This regulation seems to place an undue burden on the physician to be the "keeper" of at least some of his patients. Quaere whether such inquiry, sufficient to keep the physician well-informed enough to satisfy the reporting rules, may amount to a 5th Amendment invasion of the patient's privacy?
20. MAC, 325.71.
21. MCLA 327.8; *Wyant v. Figy,* 340 Mich. 602, 66 N.W. 2d 240 (1954); MCLA 327.14; MCLA 327.15; MCLA 327.18.
22. Op. Atty. Gen. 1943-44, No. 0-1849, p. 673; MCLA 327.16; *Highland v. Schulte,* 123 Mich. 360, 82 N.W. 62; MCLA 327.17.
23. MCLA 327.16; *Highland v. Schulte,* supra note 22.
24. MCLA 327.8; MCLA 327.151.
25. MCLA 327.10; MCLA 327.15; *Rock v. Carney,* 216 Mich. 280, 185 N.W. 798, 22 ALR 1178 (1921); Op. Atty. Gen. 1920, p. 180.
26. MCLA 327.151; also see Op. Atty. Gen. 1943-44, No. 0-1849, p. 673 with respect to pediculosis.
27. For the general promulgation of quarantine power, see MAC 325.59.
28. MCLA 329.1.
29. Also see *Commonwealth v. Jacobsen,* 197 U.S. 11, 25 S. Ct. 358, 49 L. Ed. 643, Anno. 30 ALR 1138; and *People ex rel Hill v. Board of Education of the City of Lansing,* 224 Mich. 338, 195 N.W .95 (1922); and Op. Atty. Gen. 1917, p. 205.
30. MAC 325.70.
31. MAC 325.71.
32. MAC 325.51; 325.71.
33. MAC 325.51; 325.71.
34. MAC 325.53, Regulation 7.
35. MAC 325.53, Regulation 8.
36. MCLA 329.203.
37. MAC 325.53, Regulation 9.
38. MAC 325.53, Regulation 11. Note the possibility for non-judicial penal confinement.
39. MAC 325.53, Regulation 14.
40. MCLA 750.1.
41. MCLA 327.3.
42. MCLA 327.4.
43. MCLA 327.17.
44. MCLA 325.152.
45. MCLA 325.12.
46. MAC 325.53.
47. MAC 325.53, Regulation 7.
48. MCLA 750.470.
49. MCLA 750.339.
50. Notwithstanding the explicit provision for venereal disease confinement and compulsory vaccination.
51. One respondent even went so far as to say that the law required medical treatment, but that he was not aware of any legal treatment.
52. MSA 14.346.1.
53. Under MSA 14.346.1, such consent is unnecessary.

Michigan authors

Books

Joel Hamburger, MD, Southfield, *Hyperthyroidism: Concept and Controversy,* Charles C. Thomas, Publisher, Springfield, Ill., June 30, 1972.

Articles

G. J. Dellaportas, MD, MPH, DrPh, "Correlation-based estimation of early infant mortality," page 275, *Health Services Reports,* March, 1972.

E. S. Gurdjian, MD, Detroit, "External Carotid Periarterial Stripping," Questions and Answers, *Journal of the American Medical Association,* page 1371, June 5, 1972.

Ralph M. Hulett, MD, and Fredrich S. van Reesema, MD, Ann Arbor, "Medical Care Auditing," page 68, *Hospitals,* June 1, 1972.

Julien Priver, MD, Detroit, "Bringing youth to the experienced board," page 50, *Journal of the American Hospital Association,* June 16, 1972.

William E. Rush, MD, Detroit, "Medical Orientation USA Program: A Preliminary Report," page 440, *Journal of Medical Education,* June, 1972.

John G. Wiegenstein, MD, Lansing, "AMA Star of Life needs to be recognized," page 15, *Journal of the American College of Emergency Physicians,* May/June, 1972.

Thomas J. Herrmann, MD, Ann Arbor, "Influence of an 'All-Elective' Fourth Year on Career Goal Selection," page 518, *Journal of Medical Education,* July, 1972.

Samuel J. Nichamin, MD, "Recognizing Minimal Cerebral Dysfunction in the Infant and Toddler, Some Clinical Clues and Thoughts on Management," page 255, *Clinical Pediatrics,* May, 1972.

J. J. Bookstein, MD, Ann Arbor, et al., "Arteriography in Renovascular Hypertension," page 368, *Journal of the American Medical Association,* July 24, 1972.

J. J. Brookstein, MD, Ann Arbor, et al., "Complications in Renovascular Hypertension," page 374, *Journal of the American Medical Association,* July 24, 1972.

Courageous Jim Wood (our cover artist) beats paralysis by painting

By Judith Marr
Managing Editor

Charlotte artist Jim Wood—who painted the northern Michigan shoreline on this month's *Michigan Medicine* cover—feels sorry for people who don't have a nice vantage point for watching the activities at their door.

Jim's own outlook is a large room at the side of his rambling home on Charlotte's main street, 20 miles southwest of Lansing.

He has a view of the traffic out front, the activities inside of a family of seven (three are married) and the busy flutterings of birds in the feeder outside his window. Around the corner is the Charlotte fairgrounds.

Jim's room is cluttered, well lighted, and a room that the mailman feels free to duck into for a morning chat. There's an atmosphere of caring, warmth and honest day-to-day facing of problems.

For Jim is paralyzed from the neck down, the victim of a polio attack in August, 1957, when he and his wife, Donna, were expecting their seventh child. Now 51, Jim boasts two grandsons and a marriage of 29 years.

Jim's inner view, of being fortunate for a family that cares and for a lovely spot from which to watch the world, is indicative of the spirit of this man.

"You can get discouraged," he admits. He had loved to hunt and misses the out-of-doors. "And there is so much to do nowadays."

But his courage and zest for life have led him to develop his artistic talents—and the most unusual thing about it is that Jim Wood paints with his mouth.

His brushes—called mouthsticks—have plastic mouthpieces attached which he clamps in his teeth. Some of the mouthpieces have the imprint of his teeth, for better control.

Jim was first encouraged to take up painting while hospitalized in the Ann Arbor Polio Unit following his attack. He tried stenciling on napkins, then moved to notecards, turning out 2,000 individualized cards. From there he graduated to oils and canvas.

Jim can complete a painting in 20 hours, usually finishes one a week, and had three in the works when *Michigan Medicine* recently visited. His wife mixes the paints to his specifications, some from the original tubes given him in the hospital 12½ years ago.

The exact shade can be elusive and Donna admits that "sometimes we disagree on a color."

Donna is his constant help, and her concern shows for him in every move and tone of the voice. "I don't very often get sick, thank goodness," she confides.

The easel Jim Wood paints from is battered and well-used, hand-made from wood, with holes drilled in its frame allowing it to be raised and lowered for better position.

Gristmills, farm and lake scenes, Michigan's Upper Peninsula, Isle Royale and a collection of oriental creations form the heart of his artistry. He still has many original paintings, but some have been sold.

Many of his designs have been reproduced in Christmas card collections. He averages about 1,000 sales of boxed cards a year at $1.75, each box containing 12 reproductions of four designs. Other than special bazaars and Michigan Handicraft Vocational Rehabilitation centers, he sells them only on request.

Jim's room contains his special bed, some chests of drawers, a desk, oxygen tanks and tools for maintaining his life-giving machines.

In an adjoining room is an iron lung in which he must rest for a minimum of eight hours a day. The lung is on loan from the National Polio Foundation, which has assisted Jim since his attack in 1957. The Foundation paid for nursing care the first eight years, paid hospital bills and still furnishes the tank respirator, rocking bed and other life-supporting equipment he must have.

Jim Wood is the only person in Michigan and one of only two or three in the nation to be following the unusual Mouthstick design vocation, according to Richard Bates, MD, Lansing, the first doctor in charge of Jim's treatment after his attack.

Jim was admitted to E. W. Sparrow Hospital, Lansing, after his attack.

"He went rapidly into respiratory paralysis and was treated intensively here," says Doctor Bates. "When he was sufficiently recovered, in March, 1958, he was transferred to the Ann Arbor Polio Center, headed by David Dickinson, MD. He was there until Oct. 10, 1958.

Jim Wood speaks highly of the support of Doctor Bates, Doctor Dickinson during his early illness and of the care of "all the good doctors." Doctor Bates repays the compliments.

"Jim Wood has always had a sunny disposition," Doctor Bates says. "And he has had a lot of courage."

Hemorrhagic Thrombocythemia

A case study

By Roman Andrushkiw, MD
Enrique E. Signori, MD
Dearborn

In 1920 DiGuglielmo reported a patient with erythroleukemia and marked increase in platelets and named it "piastrinemia.[1]" In 1934 Epstein and Goedel described a case with recurrent thrombocytosis and moderate erythro and leukocytosis, who also had repeated hemorrhages from mucous membranes.[2] Since that time, approximately 100 cases of this nature have been described in the literature. Many names have been applied to them, such as essential thrombophilia, thrombocythemia vera, primary hemorrhagic thrombocythemia, hyperthrombocytic myelosis, megakaryocytic leukemia and primary thrombocythemia.[3,4]

In 1960 Gunz defined hemorrhagic thrombocythemia as a syndrome in a comprehensive review.[5] Described herein is a patient with this entity and observations regarding clinical findings, pathogenesis and treatment.

Case Report

A 61-year-old male was admitted to Oakwood Hospital, Dearborn, with a chief complaint of continued bleeding following dental extraction several days prior to admission. Approximately three months before, the patient noticed increasing fatigue, soreness of gums and bleeding after brushing. In addition a large bruise had developed on his leg. Six weeks prior to admission he injured his finger and bled for two days. There was no weight loss or anorexia and no changes in eating habits.

He underwent a gastrectomy for duodenal ulcer in 1958 and a tonsillectomy and adenoidectomy as a child. There were no particular bleeding problems during the time of those operations.

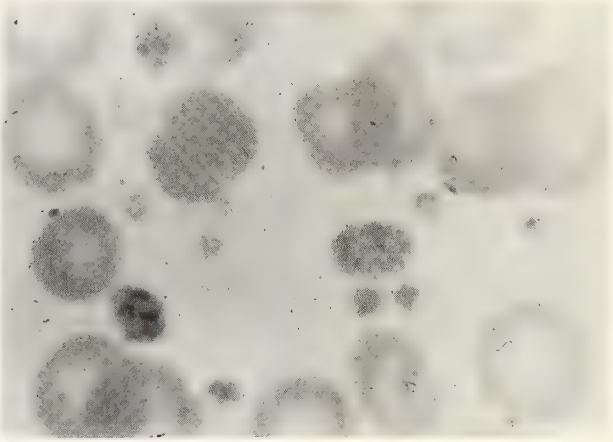

Figure 1: Peripheral blood shows large, structurally abnormal platelets. (Wright Stain; Original magnification, X800).

He smoked two packs of cigarettes per day and drank moderately. There was no significant family history.

Physical examination revealed a thin, white male, bleeding from the left upper jaw. His face was swollen slightly and a bruise was present surrounding one eye. The spleen was palpable 10cm. below the left costal margin, the liver was also enlarged, 3cm. below the right costal margin. The temperature was 98.6°F. and blood pressure 108/60mmHg. The rest of the physical examination was unremarkable.

On admission to the hospital the hemoglobin was 12.8gm/100ml, hematocrit 42.1 vols.%, white blood cell count 38,200/cu.mm., with a differential count of 11% band and 74% segmented neutrophils, 6% lymphocytes, 2% monocytes, 3% eosinophils, and 4% basophils. Moderate erythrocyte anisocytosis and poikilocytosis was observed. The platelet count on admission was 2,203,000/cm.mm with many giant forms noted. (Fig. 1).

Prothrombin time was 13.5 seconds, bleeding time 2½ minutes, clot retraction 74% (normal 44-68% in two hours), Partial Thromboplastin Time 31 seconds, heptoglobin 106mg./100ml. Uric Acid was 11.3mg./100ml, BUN 37mg./100ml., Glucose 120mg./100ml., Total bilirubin was 0.7mg./100ml., creatinine 1.1mg./100ml., serum iron 14ug./100ml., and total iron binding capacity 258ug./100ml. SGOT was 35 I.U., LDH 100 I.U., and Alk. Phos. 50 I.U. Reticulocyte count 5%, fibrinogen level was 720mg./100ml. Blood cultures

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Doctor Andrushkiw is a resident in Internal Medicine at Oakwood Hospital, Dearborn, where Doctor Signori is a consultant in Hematology and Member, Department of Medicine. Doctor Signori also is a clinical instructor in internal medicine, Department of Internal Medicine, Simpson Memorial Institute, The University of Michigan Medical Center, and a Diplomate, American Board of Internal Medicine.

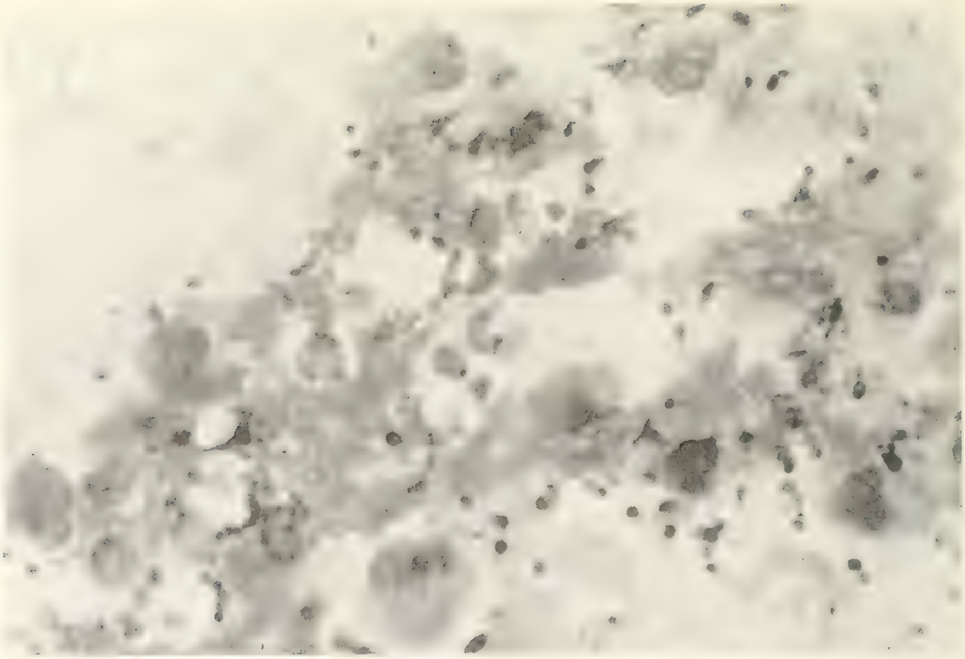

Figure 2: Bone marrow aspirate showing sheets of megakaryocytes with increased platelet formation. (Wright Stain; Original magnification, X80).

were negative. Stools for occult blood were negative. X-rays of the chest showed some pulmonary emphysema. Cholecystogram, upper GI and small bowel series were normal. The bone marrow was panhyperplastic with predominance of megakaryocytes and giant sheets of platelets. Many of the megakaryocytes exhibited bizarre nuclear configuration and cytoplasmic vacuolization. (Fig. 2 & 3).

One day after admission Heparin was started, 20,000 units subcutaneously, every 24 hours; two days later Melphalan 6mg. daily, Allopurinol 100mg. t.i.d. and Ferrous Sulfate 1200mg. per day were added. Approximately three and a half weeks after treatment the platelets were 440,000cu./mm., WBC 7,200cu./mm., hemoglobin 8.3gm/100ml., hematocrit of 29.2 vols.%.

At this time, both the Heparin therapy and Melphalan were discontinued, and approximately one month after admission, the patient was discharged. (The response to therapy is illustrated in Table 1).

He has remained on small doses of Melphalan (two mg. per day) for the past 12 months. He has not had further complications and enjoys general clinical improvement, with decreased spleen size and stable blood values.

Acknowledgements

The authors are grateful to John A. Penner, MD, who reviewed this manuscript; to K. R. Meyer, MD, for his assistance with the photographic material; and to Mrs. Patricia Altemus for her valuable secretarial help.

Discussion

The patient was admitted with hemorrhage but no definite coagulation abnormalities were found, excepting marked elevation of platelets and prolonged clot retraction time.

Clinical manifestations of bleeding ceased approximately 24 hours following initiation of therapy with Heparin. After 24 days of Melphalan a significant decrease in the total platelet count was observed and Heparin was no longer required.

The sequence of events suggests that the rapid control of prolonged bleeding was probably, at least in part, the effect of Heparin which permitted time for a more definitive form of therapy to become effective.

If we consider the better-known actions of Heparin on platelets and thrombosis, this drug appears to be a good choice for the early treatment of hemorrhagic thrombocythemia, although great caution in its use is necessary. A variety of agents have been reported effective in this disorder[6,7,8,9]; unfortunately the few cases reported lack controls, and it is difficult to evaluate their relative effectiveness.

The most common symptom of patients with hemorrhagic thrombocythemia is bleeding. The GI tract is more frequently involved, but other

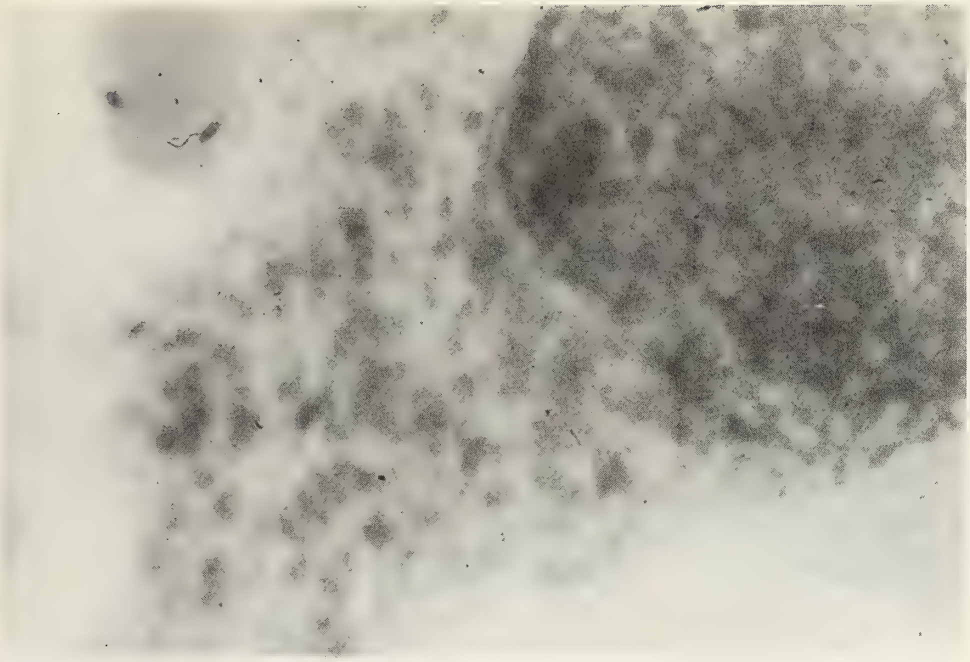

Figure 3: A close up view of megakaryocyte demonstrating massive platelet production. (Wright Stain; Original magnification, X800).

sites also are described. Bleeding usually is recurrent and varying in severity, and may be spontaneous or manifested during operations, dental extractions or minor trauma.[3,5,10] Thrombosis, although less common than hemorrhagic complications, occurs in approximately 35% of the cases and may be found in the spleen, extremities, brain, lungs, heart, and other organs.[10,11]

Thrombocytopenia is most commonly responsible for bleeding in platelet disorders. However, in the case of hemorrhagic thrombocythemia, the opposite is present. The number of platelets is increased and the etiology is obscure. The coagulation profile is usually normal, although prothrombin, Factors V, VII, IX, and fibrinogen have been reported decreased.[5] Reduced platelet content of 5-Hydroxytryptamine, adenosine triphosphate levels and decreased uptake of 5-Hydroxytryptamine also have been described.[12,13] In vitro studies of platelet aggregation have shown a decreased function whene these platelets are subjected to adenosine diphosphate and Epinephrine, but remain normal following addition of Collagen.[14] The adenosine diphosphatase activity has been found to be decreased[13] and the platelet adhesiveness reduced.[15,16] Ultrastructural abnormalities have been observed.[17]

Another interesting aspect of the problem is that of platelet survival. The normal platelet life span is approximately 10 to 13 days with destruction occurring as a result of utilization and senescence.

In hemorrhagic thrombocythemia the survival time is prolonged, suggesting that the increase number of platelets may not only be due to an augmented production but to a longer life span as well.

The relation of these findings to bleeding and the etiology of the disease awaits further clarification.

It should be noted that elevation of the platelet count has been described following severe exercise, or associated with asphyxia, trauma, acute blood loss, infections, neoplasms, and post-operative states. In most cases, hemorrhage does not develop and the platelet elevation is not very prominent.[10,18,19,20,21] Higher elevations of platelets and hemorrhage at times have been found in the mye-

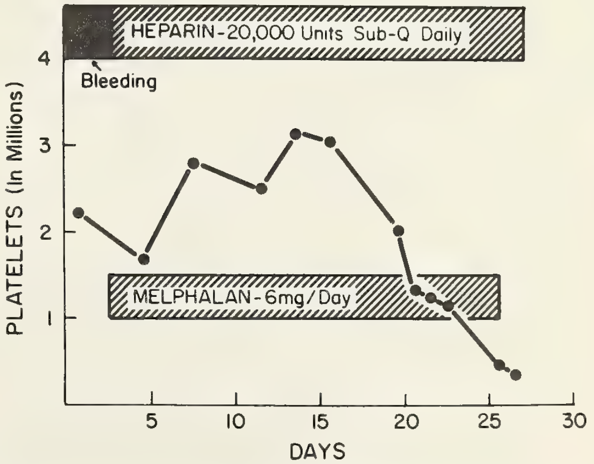

Table 1: Platelet and bleeding response to the Heparin and Melphalan program.

loproliferative disorders. And although for some authors, hemorrhagic thrombocythemia is a distinct entity, having no definite connection with other disease states,[3] we are inclined to consider it a symptom complex which presently will be better classified as a part of the spectrum of the myeloproliferative syndromes.

Summary

A 61-year-old male with hemorrhagic thrombocythemia is described as well as some of the main clinical features and abnormalities encountered in this disorder.

Treatment with Heparin and Melphalan resulted in prompt cessation of bleeding and an effective long-term control of his disease.

References

1. DiGuglielmo, G.: Megacariociti e Piastrine, Haematologica: 1:303, 1920.
2. Epstein, E.; Goedel, A.: Hamorrhagische Thrombocythamie Bei Vascularer Schrumpfmilz: Virchows Arch. *Path. Anat.* 293:233, 1934.
3. Ozer, F.L.; Truax, W.E.; Miesch, D.C.; Levin, W.C.: Primary Hemorrhagic Thrombocythemia: *American Journal of Medicine.* 28:807, 1960.
4. Hardisty, R.M.; Wolff, H.H.; Haemorrhagic Thrombocythaemia with Clinical and Laboratory Study. *Brit. J. Haemat:* 1:390, 1955.
5. Gunz, F.W.: Hemorrhagic Thrombocythemia: A Critical Review. *Blood.* 15:706, 1960.
6. Fountain, J.R., and Losowsky, M.S.: Hemorrhagic Thrombocythaemia and Its Treatment with Radioactive Phosphorus. *Quart. J. Med.* 31:207, 1962.
7. Webb, A.T.; Meyer, F.L.; and Lonser, E.R.: Hemorrhagic Thrombocythemia—Response to Busulfan. *Archives of Internal Medicine.* 111:280, 1963.
8. Bensinger, T.A.; Logue, G.L.; and Rundles, R.W.: Hemorrhagic Thrombocythemia—Control of Postsplenectomy Thrombocythosis with Melphalan. *Blood.* 36:61, 1970.
9. Robertson, J.H.: Uracil Mustard in the Treatment of Thrombocythemia: *Blood.* 35:288, 1970.
10. Harbrecht, P.J.: Too Many Platelets. *Annals of Surgery.* 167:399, 1968.
11. Spaet, T.H.; Bauer, S.; and Melamed, S.: Hemorrhagic Thrombocythemia. *Archives of Internal Medicine.* 98:377, 1956.
12. Siverstein, M.N.: Primary or Hemorrhagic Thrombocythemia. *Archives of Internal Medicine.* 122:18, 1968.
13. Spaet, T.H.; Lejnieks, I.; Gaynor, E.; and Goldstein, M.L.: Defective Platelets in Essential Thrombocythemia. *Archives of Internal Medicine.* 124:135, 1969.
14. McClure, P.D.; Ingram, G.I.; Stacey, R.S.; Glass, V.H.; Matchett, M.O.: Platelet Function Tests in Thrombocythemia and Thrombocytosis. *Brit. J. Haemat:* 12:478, 1966.
15. Cronberg, S.; Nilsson, I.M.; Gydell, K.: Hemorrhagic Thrombocythemia Due to Defective Platelet Adhesiveness. *Scandinavian Journal of Haematology.* 2:208, 1965.
16. Spaet, T.H.: Anticoagulant Effect of Excess Platelets. *Journal of Clinical Investigation.* 35:736, 1956.
17. Bussi, L.: Ultrastructural Aspects of Platelets and Megakaryocytes in Cases of Primary Thrombocythemia. *Acta Haemat.* (Basel). 35:113, 1966.
18. Hayes, D.M.; Spurr, C.L.; Hutaff, L.W.; and Sheets, J.A.: Postsplenectomy Thrombocytosis. *Ann. Int. Med.* 58:259, 1963.
19. Hirsh, J., and Dacie, J.V.: Persistent Post-Splenectomy Thrombocytosis and Thromboembolism. *Brit. J. Haemat.* 12:44, 1966.
20. Desforges, J.F.; Bigelow, F.S.; and Chalmers, T.C.: The Effects of Massive Gastrointestinal Hemorrhage on Hemostasis. *J. Lab. and Clin. Med.* 43:501, 1954.
21. Lipson, R.L.; Bayrd, E.D., and Watkins, C.H.: The Post-Splenectomy Blood Picture. *Amer. J. Clin. Path.* 32:526, 1959.

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First human virus containment lab now possible for MCF

The Michigan Cancer Foundation has been awarded a $200,000 grant for construction of the first human virus containment laboratory in Michigan. The National Institutes of Health National Cancer Institute made the award. The laboratory, with complete isolation and containment facilities, will be located in a penthouse atop the $5 million Meyer L. Prentis Cancer Center, currently under construction in the Detroit Medical Center.

At work at the MCF Center is a new five-man team of research scientists whose goal is to prove that viruses cause leukemia and breast cancer.

The team is headed by Marvin A. Rich, PhD, one of the world's foremost authorities on experimental leukemia, who is now head of the MCF biology department. He has brought with him his four member research team from the Albert Einstein Medical Center, including Samuel B. Horowitz, PhD, a cell physiologist who headed the Albert Einstein cellular biophysics laboratory since 1963.

Bile salts in health and disease

By John P. Papp, MD
Grand Rapids

Bile salt metabolism, excretion, absorption, and relationship to such common disorders as cholelithiasis, renal lithiasis, and malabsorption is an exciting, rapidly progressing frontier in gastroenterology.

The biliary system is an excretory route for cholesterol, bile pigments, and phospholipids. It aids digestion and absorption of dietary fat and fat soluble vitamins.

Chemistry

The conversion of cholesterol to bile acids involves two main reactions. The first is hydroxylation of the steroid nucleus of cholesterol. The microsomal fraction of the hepatocyte probably has this task. The second reaction consists of side chain degradation. This reaction probably occurs in the mitochondrial fraction of the hepatocyte.[1] Thus two bile salts are formed. These *primary* bile salts, cholic (C) and chenodeoxycholic (CDC), differ only in the presence or absence of a 12 alpha hydroxyl group. Cholic is a trihydroxy bile salt and CDC is a dihydroxy bile salt (**Figure** 1).

Conjugation

Conjugation with glycine (G) or taurine (T) occurs in the hepatocyte before secretion into a biliary caniculus. Polarity of the bilt salt molecule is increased by conjugation and increased resistence occurs to precipitation. Unconjugated primary bile salts are precipitated at pH 6.5.[2] At normal biliary and intraluminal small bowel pH, conjugated bile salts are almost completely ionized.

Taurine is preferentially used for conjugation.[3] The degree of its conjugation depends upon its supply and precursors, cystine and methionine. Normally the G:T ratio is 3:1. Ingestion of taurine increases its proportion, but this is not true for glycine. The G:T ratio is increased in myxedema, following bypass, resection, or extensive inflammation of terminal ileum.[2] The G:T ratio is decreased in hyperthyroidism and obstructive jaundice.[2]

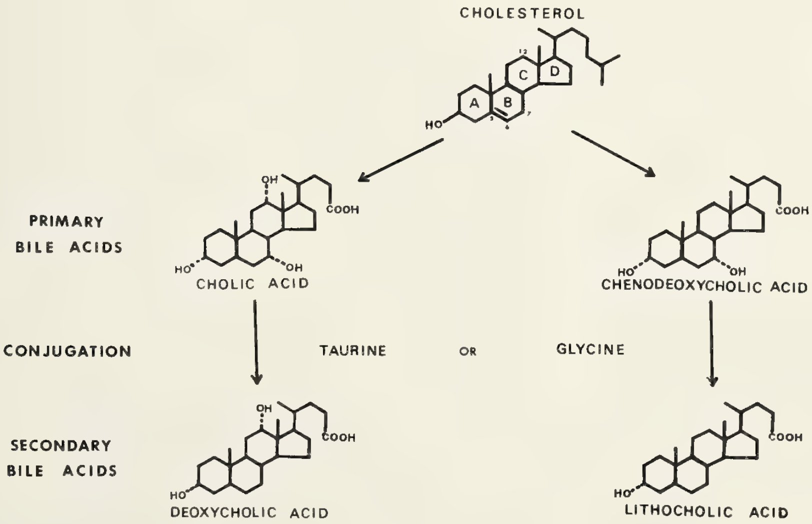

Figure 1. Conversion of cholesterol to primary bile acids and subsequent conjugation with taurine or glycine. Bacterial flora convert the primary bile acids to secondary bile acids.

The author, a gastroenterologist, is in private practice. He is affiliated with Blodgett Memorial Hospital.

Once in the gastrointestinal tract, a dehydroxylase enzyme produced by bacterial flora acts on C-7 of the steroid nucleus converting the primary bile acids, C and CDC, into *secondary* bile acids, deoxycholic (D) and lithocolic (L) **(Figure 1).**

Lithocolic acid is insoluble under normal circumstances. It plays no role in lipid solubilization. Lithocolic acid arises as a result of 7 alpha dehydroxylation of CDC. One explanation for lithocholic's poor absorption is that sulfation at the C-3 hydroxyl group results in a large charged water soluble molecule. When fed to animals, hemolysis, bile duct proliferation, and cirrhosis have been noted to occur.[4-6] In inflammatory bowel disease, its absorption is increased.[7]

Deoxycholic acid occurs after dehydroxylation of cholic acid and constitutes approximately 20 per cent of the total bile salt pool.

Absorption

Absorption occurs via active and passive mechanisms. Passive absorption occurs in the proximal small bowel and active absorption in the terminal ileum. Unconjugated bile salts are nonionized at normal intraluminal pH and are passively absorbed. Conjugation of C, CDC, and D with *glycine* allows passive absorption by the proximal small bowel, but at a slower rate than that of unconjugated bile salts.[1]

However, passive absorption comprises a small per cent of bile salt absorption. Approximately 90 per cent of bile salts are actively absorbed at the terminal ileum. It is the only small bowel site of absorption for taurine conjugates. Conjugated trihydroxy salts are better absorbed than dihydroxy salts.[2]

Enterohepatic Circulation

After absorption, conjugated or unconjugated bile salts are carried bound to albumin into the portal system to the liver. If they are unconjugated, reconjugation will occur and secretion as conjugated bile salts recurs into the biliary caniculus. A feed-back mechanism for bile salt regulation has recently been shown to be related to the suppression of the enzyme cholesterol 7-alpha hydroxylase by returning bile salts.[8]

The bile salt pool is 3-4 grams. The entire pool circulates at least twice during digestion of a single meal. Therefore, in a normal day the pool may circulate six to eight times. Only two to three per cent is lost in the feces (300-800mg). Urinary excretion is usually unimportant except in liver disease when it may reach 60 per cent of the total loss per day.[9]

In response to a meal secretion amounts to an intraluminal concentration of five to 25 mM/liter. High levels usually occur in 30 minutes after the start of a meal. Factors involved in bile salt concentrations are as follows: duration of fasting; quality of gall bladder function; rate of gastric emptying; fluid content of a meal; and its content.

The ascending and transverse colon can also absorb bile salts via active and passive absorption.[10] The kinetics are not well understood.

The liver's capacity to increase synthesis is limited. A four- to six-fold increase can occur, but any further demand will lower the total bile salt pool.[11] In a steady state, bile salt synthesis is at that amount necessary to replenish fecal bile salt loss.

Physiochemical Properties

Hydrophilic and hydropholic groups confer detergent properties to bile salts. As higher concentrations of bile salt monomers occur, they aggregate and form polymolecular aggregates. These are called *micelles.* This occurs when a critical micellar concentration (2.0 mM/liter) and critical temperature (Kraft point) exists.[2]

Orientation of bile salts occurs in such a way as to have hydrophilic groups outermost facing the water medium and its nonpolar hydrocarbons inwards facing the center of the micelle. Cholesterol, which is nonpolar, can therefore be dissolved in the center of the micelle.

Free fatty acids and monoglycerides swell the micelle resulting in enlargement of the micelle center and more solubilization of cholesterol. Lecithin is also a polar molecule. When added to the micelle, a linear rise in cholesterol solubility results.[2]

Unconjugated bile salts do not participate in micelle formation.

Cholerheic Enteropathy

Cholerheic enteropathy occurs when the terminal ileum is resected, bypassed, or diseased resulting in bile salt malabsorption and diarrhea. The malabsorption presents unabsorbed bile salts to the colon in quantities it is incapable of handling. The dihydroxy bile salt, deoxycholic acid, causes secretion of water and electrolytes into the lumen consistently at three mM/liter concentration. Chenodeoxycholic acid does the same at five mM/liter. Cholic acid doesn't seem to have a causal role. The mechanism for this secretion of water and electrolytes is not well understood, but it is postulated that bile acids impair hydrolysis of

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SE, Grand Rapids, 49506.

ATP by a membrane bound Na-ATPase, thereby resulting in secretion rather than absorption.[10]

In addition to the above mechanism, bile salts themselves increase colonic motility. Because of a decreased bile salt pool, micellar formation is decreased and steatorrhea occurs resulting in more diarrhea. Fatty acids are converted in the colon to hydroxy fatty acids, which can probably act as cathartics.

If less than 100 centimeters of terminal ileum is resected or bypassed, steatorrhea is usually less than 20 grams per day with minimal amounts of hydroxy fatty acids. This diarrhea responds to cholestyramine one packet (four grams) four times a day.

If greater than 100 centimeters of ileum is removed, fat malabsorption occurs because of malabsorption of bile salts even though there is increased bile acid synthesis. With reduced jejunal bile salt concentration, the critical micellar concentration is not achieved. These patients have greater than 20 grams of steatorrhea per day and a large amount of hydroxy fatty acids. This diarrhea responds to fat withdrawal, medium chain triglyceride replacement, and cholestyramine (16 grams per day).

Hyperoxaluria and Oxalate Stones

With ileal disease, bypass, or resection, the ratio of G:T increases and glycine conjugated bile salts spill over into the colon. Anaerobic colonic flora deconjugate glycine and convert it to glyoxalate. Glyoxalate is absorbed and carried via the portal system to the liver where by oxidation it is changed to oxalic acid. Release into the systemic circulation results in hyperoxaluria. If the urine concentration is high enough, oxalate stones will occur.

It is important to remember why the G:T ratio increases. Taurine conjugated bile salts are actively absorbed at the terminal ileum because they are completely ionized and are dependent upon active transport. Besides fecal wastage, taurine stores eventually become depleted. Consequently, an increase in the G:T ratio occurs. Glycine conjugated bile acids on the other hand are weaker acids (pKa 3.8-5.0) and may therefore be reabsorbed by non-ionic diffusion.

Because taurine can be given by mouth and absorbed in the proximal bowel, a decrease in the G:T ratio will occur when three grams three times a day is given. This will result in less glycine available for conversion to oxalate.

Steatorrhea

This has adequately been discussed above. A decreased bile salt pool results in decreased micellar production resulting in steatorrhea. In the Zollinger-Ellison syndrome, intraluminal pH may be less than 4.5. At this level, glycine bile salts are precipitated and pancreatic lipase is irreversibly denatured. Thus, poor micellar formation and impaired triglyceride hydrolysis results in steatorrhea.

Neomycin and Kanamycin can precipitate bile salts. This may be the reason for the malabsorption occurring after their usage.[12]

Cholelithiasis

Lithogenic bile is a term not to be confused with lithocholic. Lithogenic bile contains a lower concentration of bile salt than normal, especially a greater proportion of dihydroxy salts, as well as a lower phospholipid content.[13] With Small's triad in mind,[14] it is easy to visualize how several variables could influence cholesterol, bile salts, and phospholipid (lecithin) concentrations and thereby result in a solution either in or out of the micellar phase.

Patients with ileal resections have a high incidence of gallstones[15] and a diminished bile acid pool.[16] Therefore, it seems reasonable to replace the bile acid that is deficient. Also, bile salts may enhance the release of preformed biliary lecithin and thus improve the ability of bile to solubilize cholesterol.[17]

It is of interest that Cole and Harridge[18] in 1957 gave three to four grams per day of bile salt to patients with a common duct stone with the disappearance of the stone in seven of nine patients in eight to 13 weeks.

From in vitro studies, Small[19] calculated that it would take one year to dissolve 15 small stones weighing one gram collectively and three years to dissolve one stone weighing one gram. The difference is due to surface area exposed.

Glyco-chenodeoxycholic acid has become a very exciting medication for use in dissolution of gallstones. It has been found to decrease the lithogenic bile of Chippewa women when a dose of 750-1000 mg. per day was given orally.[20] Danzinger, et al. had dissolution of gallstones in four of seven women using chenodeoxycholic acid in a dose of 0.75 to 4.5 grams per day.[21]

Blind Loop Syndromes

Where there is stasis in the gut, bacteria normally present multiply significantly. Stasis occurs in the afferent loop syndrome, jejunal diverticulosis, partially obstructing strictures (as in Crohn's disease), and in scleroderma. Bacteroides and lactobaccili species possess enzymes capable of hydrolysis of bile salts, whereas aerobic and faculitative anaerobes are less likely to do so. In stasis syndromes, the key process is poor micelle formation resulting in malabsorption of fat.

Obstruction

Either intrahepatic or extrahepatic obstruction results in micellar formation impairment. Carbohydrate and protein digestion are not affected. A moderate amount of triglyceride intake can be absorbed without bile salts. However, fat soluble vitamins are entirely dependent on micellar formation at a concentration above the critical 2mM/liter.

The pruritus of biliary tree obstruction does not correlate with serum levels of bile salts. Relief of pruritus does correlate with reduction in serum level.[22] The degree of pruritus experienced by the patient is related to the concentration of bile salt on the skin.

Gastric Ulcer Disease

Hypersecretion of hydrochloric acid may occur for many reasons in diseases related to bile salt abnormalities. It is of interest that bile salts appear to cause the release of gastrin.[24] If one also happens to have greater than 60 centimeters of terminal ileum removed, hypersecretion of hydrochloric acid occurs. The mechanism of either of the above is not known, but the end result may be a gastric ulcer. It is well known that the incidence of peptic ulcer disease is increased in Crohn's disease.

It has been shown that bile salts lower the gastric mucosal barrier to hydrogen ions and that some absorption of bile salts is possible.[25,26] Reflux of bile is common in gastric ulcer disease.[26] Thus, it is easy to set the stage for gastric ulceration. Since taurine conjugates have a low pKa, they would be more likely to be incriminated than glycine conjugates (1.8 and 4.0, respectively).

There is growing support for the concept that chronic bathing of the stomach that has been operated upon by bile results in an increased incidence of carcinoma. Indeed, Stalsberg and Taksdal[27] report a six-fold increase in patients in whom surgery occurred greater than 25 years before death. Perhaps, bile salts also play a part in the increased incidence of adenocarcinoma in Crohn's disease.[28]

Tests

Bile salt determinations on feces, duodenal aspirations, and serum have been done for several years. However, the techniques are cumbersome.

Recently Fromm and Hofmann[29] and Sherr, et al.[30] have advocated using glycine 1-^{14}C-cholate and measuring $^{14}CO_2$ specific activity in expired air by a breath analysis technique. This technique is relatively simple, can be done as an outpatient, and has a negligible radiation exposure. Further studies are needed, but the technique has promise and usefulness on a practical basis.

Summary

In conclusion, it has been my objective to discuss in an orderly sequence the topic of bile salts and to condense the rapidly expanding literature into useful categories for discussion. It is vital for all of us to become familiar with this new frontier in gastroenterology.

Bibliography

1. Palmer RH: The significance of bile salts metabolism. *Hospital Practice* 4:71-79, 1969.
2. Badley BWD: Bile salts. *Canadian Med Ass'n J* 102:159-164, 1970.
3. Garbutt JT, Lack L, Tyor MP: The enterohepatic circulation of bile salts in gastrointestinal disorders. *Am J Med* 51:627-636, 1971.
4. Palmer RH, Hurban Z: Production of bile duct hyperplasia and gall bladder stones by lithocholic acid. *J Clin Invest* 45:1255-67, 1966.
5. Schaffner F, Javitt NB: Morphologic changes in hamster liver during intrahepatic cholestasis induced by taurolithocholate. *Lab Invest* 15:1783-1792, 1966
6. Javitt NB, Emerson S: Effect of sodium taurolithocholate on bile flow and bile acid excretion. *J Clin Invest* 47:1002-1014, 1968.
7. Carey JB Jr: Conversion of cholesterol to trihydroxycoprostanic acid and cholic acid in man. *J Clin Invest* 43:1443-1448, 1964.
8. Shefer S, Houser S, Bekersky I, et al: Biochemical site of regulation of bile acid biosynthesis in the rat. *J Lipid Res* 11:404-411, 1970.
9. Blum M, Spritz N: The metabolism of intravenously injected isotopic cholic acid in Laennec's cirrhosis. *J Clin Invest* 45:187-193, 1966.
10. Mekhjian HS, Philips SF, Hofmann AF: Colonic secretion of water and electrolyte induced bile acids: perfusion studies in man. *J Clin Invest* 50: 1569-1577, 1971.
11. Hofmann AF: A physicochemical approach to the intraluminal phase of fat absorption. *Gastroenterology* 50: 56-64, 1966.
12. Faloon WW, Paes IC, Woolfolk D, et al: Effect of neomycin and kanamycin upon intestinal absorption. *Ann NY Acad Sci* 132:879-887, 1966.
13. Tamesue N, Juniper K Jr: Concentrations of bile salts at the critical micellar concentration of human gall bladder bile. *Gastroenterology* 52:473-479, 1967.
14. Small DM: Gallstones. *New Eng J Med* 279:588-593, 1968.
15. Heaton KW, Read AE: Association of gallstones with disorders of the terminal ileum. *Gut* 10:414, 1969.
16. Vlahcevic ZR, Bell CC Jr, Buhac I, et al: Diminished bile acid pool size in patients with gallstones. *Gastroenterology* 59:165-173, 1970.

(Continued on Page 869)

Perinatal Tips

By Paul M. Zavell, MD
Detroit

The following case from the files of the Wayne County Medical Society Perinatal Mortality Committee is presented as an aid in continuing education.

Maternal

This was the first pregnancy for a 23-year-old, white O+ mother. Pregnancy had been uneventful and she had received regular prenatal care. At term she went into labor and delivered a 5 lb. 8 oz. female infant 11 hours later. The mother had a negative VDRL.

Fetal

At birth this infant was in a depressed state with a cord around the neck. Initial resuscitation efforts were not successful (though vigorous) so that it was necessary to intubate her and later use a Bennett respirator. The heart rate varied from 100-120 per minute.

When first seen by the pediatric staff 30 minutes later the infant was cyanotic and still not breathing spontaneously. Breath sounds were heard poorly on the left side and none noted on the right. Thinking this might be respiratory distress, eight cc's of sodium bicarbonate as a direct push followed by 50% glucose water were given via the umbilical vein. No improvement was noted.

A chest film revealed a massive right-sided tension pneumothorax which was immediately relieved by direct needle aspiration so that respirations immediately improved. Shortly thereafter a catheter was inserted into the right chest. The infant's color became excellent and she now breathed normally. The endotracheal tube was removed shortly thereafter without difficulty.

On the second day of life she weighed five pounds, four ounces, and was generally doing well. Only minimal amounts of air were recovered following thoractomy drainage so that it was possible to remove the tube successfully 48 hours later. The infant's course was completely uneventful thereafter and she was discharged home on the fifth day.

Doctor Zavell is chairman, Neo-Natal and Hospital Care Committee, Michigan Chapter, A.A.P., and chairman, Perinatal Mortality Study Committee, Wayne County Medical Society.

Perinatal Committee Comments

1) This case nicely stresses the truth of the statement that not all babies having respiratory distress have the true respiratory distress syndrome. That is, respiratory distress may be due to CNS, Cardiac, Respiratory, Hematologic or other problems and not "hyaline membrane disease" only or primarily.

2) Whenever an infant is having respiratory distress symptoms, a chest X-ray should be done to rule out other possibilities than R.D.S. (such as a pneumothorax here).

3) Not all pneumothoracies need treatment but tension pneumothorax does. Indeed, treatment is life-saving here.

BILE SALTS/Continued

17. Bell CC Jr, Vlahcevic ZR, Swell L: Alterations in the lipids of human hepatic bile after the oral administration of bile salts. *Surg Gynec Obstet* 132: 36-42, 1971.
18. Cole WH, Harridge WH: Disappearance of "stone" shadow in postoperative cholangiograms. *JAMA* 164:238-243, 1957.
19. Small DM: The formation of gallstones. *Advances Intern Med* 16:243-264, 1970.
20. Thistle JL, Schoenfield LJ: Lithogenic bile among young Indian women; lithogenic potential decreased with chenodeoxycholic acid. *New Eng J Med* 284: 177-181, 1971.
21. Danzinger RG, Hofmann AF, Schoenfield LJ, et al: Dissolution of cholesterol gallstones by chenodeoxycholic acid. *New Eng J Med* 286:1-8, 1972.
22. Wootton IDP, daSilva LC, Sherlock S: Serum-bile-acid levels in liver disease. *Lancet* 2:1049-1053, 1959.
23. McLeod GM: Bile salt concentrations in chronic liver disease. *Gut* 11:979-980, 1970.
24. Bedi BS, Debas HT, Gillespie G, et al: Effect of bile salts on antral gastrin release. *Gastroenterology* 60:256-262, 1971.
25. Davenport HW: Destruction of the gastric mucosal barrier by detergents and urea. *Gastroenterology* 54:175-181, 1968.
26. Black BR, Hole D, Rhodes J: Bile damage to the gastric mucosal barrier; the influence of pH and bile acid concentration. *Gastroenterology* 61:178-184, 1971.
27. Stalsberg H, Taksdal S: Stomach cancer following gastric surgery for benign conditions. *Lancet* 2: 1175-1177, 1971.
28. Papp JP, Pollard HM: Adenocarcinoma occurring in Crohn's disease of the small intestine. *Am J Gastroent* 56:149-156, 1971.
29. Fromm H, Hofmann AF. Breath test for altered bile acid metabolism. *Lancet* 2:621-625, 1971.
30. Sherr HP, Sasaki Y, Newman A, et al: Detection of bacterial deconjugation of bile salts by breath-analysis technique. *New Eng J Med* 285:656-661, 1971.

MSMS to continue coordination in 1973 of SAMA - MECO project

MSMS will continue to coordinate the Student American Medical Association's Medical Education and Community Orientation (SAMA-MECO) program, despite the inauguration this fall in Michigan's three medical schools of the first statewide, federally-funded program to place medical students in communities.

The purpose of the new federal program is to give interested students a better understanding of actual practice and to orient them to community medicine. The new program will esablish and train a faculty of 200 unpaid family doctors around the state who will instruct students on a one-to-one basis in the offices, clinics and hospitals where they regularly practice.

In that respect, it is similar to the SAMA-MECO program, though on a larger scale. But the students' arrangements will vary, some participating on a senior elective basis, some through their summer vacations, and some as a regular part of their year's curriculum. In each case they will receive credit toward their degrees.

Most of the students who have taken part in the SAMA-MECO program since its Michigan beginning in 1969 have spent the summer between their first and second years of medical school in a community, being introduced to the practice of medicine there. Usually, one physician has served as local coordinator in each city. The students received no course credit.

Many students and physicians may actually take part in both the SAMA-MECO and federal programs.

About 150 medical students are expected to participate in the $2 million federal program during the first year of operation. By 1974, the universities anticipate a statewide enrollment of 430.

The University of Michigan will administer the money and match students to doctors, Wayne State will enlist and oversee the 200 physicians involved, and MSU will train them.

MSMS plans to continue Michigan coordination of the SAMA-MECO project following a meeting this summer with student leaders in the program, who expressed their beliefs in its great value.

The MSMS coordination of the 1972 SAMA summer program was under the direction of Mrs. Jeanne Smith.

His summer experience had 'profound effect' on this medical student

During the next several months, *Michigan Medicine* will continue to carry some material about the MSMS-SAMA project to place students in community hospitals for summer orientation programs.

Here is one of the numerous letters received by MSMS from a sophomore medical student who participated this past summer. The name of the student and the community where he served have been removed because the student was assured his response to a questionnaire would be confidential.—Executive Editor Herb Auer.

"Your project in which I participated this summer has had such a profound effect upon me that I feel just filling out the preceding questionnaire cannot convey to you how much I have benefited from the project. My entire attitude toward the profession has been changed. Prior to the project I had serious doubts as to whether or not I could 'fit in' to what is alleged to be one of the most conservative, vested interest groups in the country. Much to my surprise I found many practicing clinicians who shared many of my ideals as to the profession and how it should improve the health care of everyone in the country.

"The teaching situation was beyond belief. Nowhere in either my undergraduate education nor in my medical education have I had such good rapport with my instructors. Nowhere have I ever experienced how exhilarating the learning process can be on a one-to-one student-teacher basis. Not only did I have an unlimited opportunity to ask questions, but I found *most* of the clinicians *better* instructors than any of mine at the university."

MSMS efforts mean 'Hospital' signs will guide travelers

Due to MSMS efforts, reflecting signs reading "Hospital" will soon be placed along state expressways to direct travelers to the nearest qualified medical care.

The Michigan Highway Department recently approved the erection of the directional signs, which become necessary as tourism increases in the state.

The signs will point the way to hospitals located within five miles of the interchange, which must provide continuous service with emergency care, have a doctor on duty 24 hours per day, seven days a week, be licensed by the Michigan Department of Public Health, and be easy to find.

MSMS first requested such signs in 1970, and recent efforts were advanced by Donald R. McCorvie, MD, Williamston, chairman of the MSMS Committee on Rural Medical Service.

Younger Ingham physicians confer with MSMS

MSMS President John J. Coury, MD, conferred with 25 Ingham County physicians under 45 in the second of a series of such informal workshops to seek ideas and suggestions. Left to right are Pedro Ojeda, MD, Jose Llinas, MD, and Doctor Coury.

Discussing MSMS services to members, Warren Tryloff, left, visits with Harold E. Crow, MD, center, and Virinder S. Grewal, MD, right.

Thomas C. Payne, MD, left, member of the MSMS Committee on Public Relations, presided at the dinner meeting and urged greater participation by his fellow younger associates. Visiting in the MSMS lobby, Doctor Payne talks with Donald H. Kuiper, MD, center, and D. W. Thaden, MD, right.

Among the younger Ingham physicians participating was Donald McCorvie, MD, center, Williamston, who is chairman of the MSMS Committee on Rural Medical Service. Here he visits with George C. Hardy, MD, left, and Adnan H. Eldadah, MD, right.

Michigan mediscene

Oct. 19—Annual meeting, Michigan TB and Respiratory Disease Association, and Michigan Thoracic Society, Kellogg Center, Michigan State University, contact: Les Harcus, public information specialist, MTRDA, 403 Seymour Ave., Lansing, 48914

Oct. 19-21—American Academy of Psychiatry and the Law, Ann Arbor, contact: Seymour Pollack, secretary, AAPL, University of Southern California Medical School, Los Angeles, 90033

Oct. 25—Family Practice Day, sponsored by the Michigan Academy of Family Physicians, Grosse Pointe War Memorial, 32 Lake Shore Road, Grosse Pointe Farms, contact: Mrs. Rita Feldkamp, MAFP executive secretary, 933 Wing St., Plymouth, 48170

Nov. 8—The Council, special meeting, noon, MSMS Headquarters, contact: Warren F. Tryloff, MSMS director

Nov. 9-10—MSMS Conference on the Physician and Environmental Quality Control, Hilton Inn, Detroit Metropolitan Airport, contact: Helen Schulte, MSMS Headquarters

Nov. 9-10—Third annual Cardiology Symposium, "Cardiology for the Practitioner," Borgess Hospital, Kalamazoo, contact: Roberto Barcala, MD, 1521 Gull Road, Kalamazoo, 49001

Nov. 26-29—Many Michigan physicians will be traveling to Cincinnati for the AMA Clinical Convention.

Dec. 6—The Council, MSMS Headquarters, contact: Warren F. Tryloff, MSMS director

Dec. 9—December Seminar, "Odontogenic Tumors," of the Michigan Society of Pathologists, Rackham Auditorium, The University of Michigan, Ann Arbor, contact: Jacob E. Briski, MD, Saint John Hospital, 22101 Moross Road, Detroit, 48236

Jan. 20-21—Midwinter Seminar of the American Association of Medical Assistants, State of Michigan Branch, Hayes Hotel, Jackson, contact: Margaret Broadwell, Michigan president, 406 Professional Plaza, 3800 Woodward Ave., Detroit, 48201

Jan. 30—Board meeting, Woman's Auxiliary to MSMS, MSMS Headquarters, contact: Mrs. Fleming Barbour, 2015 Lincoln Drive, Flint, 48503

Feb. 6-10—American Group Psychotherapy Association, Hilton Hotel, Detroit, contact: Margaret Keefe, administrative secretary, 1865 Broadway, New York, 10023

Feb. 26-March 2—Clinical gastroenterology postgraduate course sponsored by the American College of Physicians, Towsley Center, University of Michigan Medical Center, Ann Arbor, contact: H. M. Pollard, MD, 2012 Vinewood Blvd., Ann Arbor, 48104

March 18—Board meeting, American Association of Medical Assistants, State of Michigan Branch, MSMS Headquarters, contact: Margaret Broadwell, 406 Professional Plaza, 3800 Woodward Ave., Detroit, 48201

March 21-22—Annual Michigan Conference on Maternal and Perinatal Health, Olds Plaza Hotel, Lansing, contact: Helen Schulte, MSMS Headquarters

March 20—Annual Legislative Day, Woman's Auxiliary to MSMS, Olds Plaza Hotel, Lansing, contact: Mrs. R. J. Westerhoff, 2458 Maplewood, SE, Grand Rapids, 49506

April 26-29—Annual State Convention, AAMA, Michigan branch, Dearborn Inn, Dearborn, contact: Margaret Broadwell, 406 Professional Plaza, 3800 Woodward Ave., Detroit, 48201

May 15-16—Spring conference, Woman's Auxiliary to MSMS, Hidden Valley Lodge, Gaylord, contact: Mrs. Fleming Barbour, 2015 Lincoln Drive, Flint, 48503

MSMS to sponsor international meeting on physician, pollution

Representatives of eight state legislatures and medical societies, the Michigan Senate and House and the MSMS Committee on Public and Environmental Health will convene Nov. 9-10 at the Hilton Inn, Detroit Metropolitan Airport.

Also present will be delegates from the Ontario Medical Association and the Michigan Student Environmental Commission.

They will discuss the physician's role in the field of ecology and pollution and its subsequent health hazards. They also will propose the formation of an association of the Great Lakes states and Ontario for the physician and his part in environmental quality control.

The conference will be sponsored by MSMS to continue "the excellent beginning made by the Ontario Medical Association toward the solution of problems in connection with the health aspects of pollution of the Great Lakes watershed."

That statement was made by the MSMS Public Health Committee in a special report to The MSMS Council in March, when The Council approved $1,000 toward the support of the conference. The first such meeting was sponsored by the Ontario Medical Association in Toronto in April, 1970, with a follow-through telephone conference in April, 1971.

Co-chairmen of the conference are John H. Kitchel, MD, Grand Haven, member of the state water resources commission, and Edward J. Klopp, MD, Battle Creek.

Major portions of the Thursday afternoon-Friday morning program will be devoted to pollution of the macro-environment—air, water and soil; the responsibilities of a physician serving on a political administrative body; youth and the environment; "how medicine can make an impact on legislation and environmental control," and a panel presentation by legislators.

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Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired. Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, **check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently**—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Rarely, necrotizing vasculitis, paresthesias, icterus, pancreatitis, and xanthopsia have occurred with thiazides alone.

Supplied: Bottles of 100 capsules.

SK&F CO.
Carolina, P.R. 00630
a subsidiary of Smith Kline & French Laboratories

IN EDEMA*—IN HYPERTENSION*

If you've seen one, have you really seen them all?

The following patient profiles represent typical clinical situations, but do not necessarily represent actual cases.

Age 22, previously normal menses with occasional menorrhagia. Now on a sequential O.C. for four month Complains of heavy flow, occasional intracyclic bleeding, edema, tender swollen breasts.

Indicates estrogen excess.

1st choice: Switch to a combination 50-mcg.-estrogen O.C. (such as **Demulen***).

Age 19, small breasts, minor hirsutism, oily hair and skin. History of metrorrhagia, skipped or scanty menses. New user.

Indicates androgenic excess or estrogen deficiency (fertility is suspect).

1st choice: An estrogen-dominant O.C. (such as **Enovid-E***).

Age 25, average frame, poor complexion. No problem with menses, normal para 1. On a low-estrogen/high-progestogen O.C. for two years. Now complains of scanty flow, decreased libido, depression.

Indicates probable buildup of progestogen-related side effects.

1st choice: Switch to a center-spectrum O.C. with more estrogen, less progestational activity (such as **Ovulen***)

Age 21, short, mammose, with normal menses, some acne. Was put on prenuptial regimen of 50-mcg.-estrogen/moderate-progestogen O.C. for two months. Now has increased acne.

Indicates metabolic production of androgen or relative estrogen deficiency

1st choice: Switch to a 100-mcg.-estrogen combination (such as **Enovid-E*** or a sequential).

Unmasked, physiologically and anatomically, they're not all the same. A basic difference lies in their hormone profiles. One may secrete too much estrogen, another not enough...or perhaps too much androgen; the vast majority would fit somewhere into the broad center spectrum.

Although the profiles described below may not be completely predictive, in optimal O.C. selection, the estrogen-progestogen activity ratio should be carefully matched to the patient profile. Searle offers you O.C.s in a range not only suitable for your patients in the balanced center spectrum, but also adaptable to the patient with another type of hormone profile.

Oral contraceptives are complex medications. Among the commonly reported adverse reactions are: intracycle bleeding, fluid retention, tender or swollen breasts, exacerbation of acne condition, changes in libido, amenorrhea while on medication and upon discontinuance, nausea, leg cramps, headaches, weight gain. Therefore, after reference to the prescribing information, oral contraceptives should be prescribed with care.

*Note: In some patients any level of exogenous estrogen or progestogen may produce symptoms of excess hormone activity.

Age 25, tall, slender, athletic, with flat chest. On a progestogen-dominant 50-mcg.-estrogen O.C. Has recurrent trichomoniasis and Monilia.

Indicates estrogen deficiency and excess of progestogen in current O.C.

1st choice: Switch to a combination pill with 100 mcg. estrogen and less progestational activity (such as **Enovid-E*** or **Ovulen*** or a sequential).

Age 23, "Miss America" figure, previously normal menses, healthy skin and hair. On a 50-mcg.-estrogen pill for four months. Complains of intracyclic bleeding.

Indicates probable need for more estrogen.

1st choice: Switch to a center-spectrum O.C. with more estrogen and moderate progestogen dominance (such as **Ovulen***).

Age 21, college senior, average build. On highly progestogen-dominant/low-dose-estrogen O.C. for six months. Now complains of amenorrhea, between-cycle headaches, weight gain.

Indicates probable progestogen excess.

1st choice: Switch to a center-spectrum pill (such as **Ovulen***).

Age 27, slightly overweight, multiparous. Nausea with all three pregnancies and with a sequential O.C. three years ago. Has premenstrual fluid retention and leg cramps.

Indicates probable excess of estrogen

1st choice: A 50-mcg.-estrogen/progestogen-dominant pill (such as **Demulen***).

Ovulen® a balanced center-spectrum O.C. for most

Each white tablet contains ethynodiol diacetate 1 mg./mestranol 0.1 mg.

Demulen® a moderately progestogen-dominant O.C. for many

Each white tablet contains ethynodiol diacetate 1 mg./ethinyl estradiol 50 mcg.

Each pink tablet in Ovulen-28® and Demulen®-28 is a placebo, containing no active ingredients.
Both Ovulen and Demulen are available in 21- and 28-pill schedules.

SEARLE Products of SEARLE & CO.
San Juan, Puerto Rico 00936

Enovid-E® a moderately estrogen-dominant O.C. for some

Each tablet contains norethynodrel 2.5 mg./mestranol 0.1 mg.

SEARLE Product of Searle Laboratories Division
G.D. SEARLE & CO.
P.O. Box 5110, Chicago, Illinois 60680
Where "The Pill" Began

or a brief summary
f prescribing information,
lease see next page.

a family of O.C. products to help you match the right pill to the right patient

Ovulen®

Each white tablet contains.
ethynodiol diacetate 1 mg./mestranol 0.1 mg.

Demulen®

Each white tablet contains
ethynodiol diacetate 1 mg./ethinyl estradiol 50 mcg.

Each pink tablet in Ovulen-28® and Demulen®-28 is a placebo, containing no active ingredients.

Actions—Ovulen and Demulen act to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Ovulen and Demulen depress the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Special note—Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision.

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication—Ovulen and Demulen are indicated for oral contraception.

Contraindications—Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia and undiagnosed abnormal genital bleeding.

Warnings—The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality conducted in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism, and cerebral thrombosis and embolism and the use of oral contraceptives. There have been three principal studies in Britain[1-3] leading to this conclusion, and one[4] in this country. The estimate of the relative risk of thromboembolism in the study by Vessey and Doll[3] was about sevenfold, while Sartwell and associates[4] in the United States found a relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions medication should be withdrawn.

Since the safety of Ovulen and Demulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Ovulen or Demulen. Therefore, if such tests are abnormal in a patient taking Ovulen or Demulen, it is recommended that they be repeated after the drug has been withdrawn for two months. Under the influence of progestogen-estrogen preparations preexisting uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Ovulen or Demulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Ovulen or Demulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Ovulen or Demulen may mask the onset of the climacteric. The pathologist should be advised of Ovulen or Demulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives—A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function: increased sulfobromophthalein retention and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T^3 uptake values; metyrapone test and pregnanediol determination.

References: 1. Royal College of General Practitioners: Oral Contraception and Thrombo-Embolic Disease, J. Coll. Gen. Pract. *13*:267-279 (May) 1967. **2.** Inman, W. H. W., and Vessey, M. P.: Investigation of Deaths from Pulmonary, Coronary, and Cerebral Thrombosis and Embolism in Women of Child-Bearing Age, Brit. Med. J. *2*:193-199 (April 27) 1968. **3.** Vessey, M. P., and Doll, R.: Investigation of Relation Between Use of Oral Contraceptives and Thromboembolic Disease. A Further Report, Brit. Med. J. *2*:651-657 (June 14) 1969. **4.** Sartwell, P. E.; Masi, A. T.; Arthes, F. G., Greene, G. R., and Smith, H. E.: Thromboembolism and Oral Contraceptives: An Epidemiologic Case-Control Study, Amer. J. Epidem. *90*:365-380 (Nov.) 1969

SEARLE

Products of SEARLE & CO
San Juan, Puerto Rico 00936

Enovid-E®

norethynodrel 2.5 mg./mestranol 0.1 mg.

Actions—Enovid-E acts to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Enovid-E depresses the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Indication—Enovid-E is indicated for oral contraception.

The *Special Note, Contraindications, Warnings, Precautions* and *Adverse Reactions* listed above for Ovulen and Demulen are applicable to Enovid-E and should be observed when prescribing Enovid-E.

Enovid-E®

brand of norethynodrel with mestranol

SEARLE

Product of Searle Laboratories Division
G.D. SEARLE & CO.
P.O. Box 5110, Chicago, Illinois 60680
Where "The Pill" Began

“For generations my family has insisted on Donnagel®-PG,” says active young matron Mrs. T. Farnsworth Lipp (of the Upper Lipps), shown here with her charming son. “All the benefits of paregoric—without the unpleasant taste, don't you know? And Junior thinks Donnagel-PG tastes so much like bananas that I never worry about a slip between spoon and Lipp.”

A Matter of Taste

With or without a silver spoon, a most tasteful solution in treating acute, non-specific
heas: all the benefits of paregoric, without the unpleasant taste. Donnagel®-PG treats
mpanying cramping, tenesmus, and nausea as well as the diarrhea itself. Instead of
easant-tasting paregoric, it contains the therapeutic equivalent, powdered opium,
romote the production of formed stools and lessen the urge. And it provides the
ılcent-detoxicant effects of kaolin and pectin, plus the antispasmodic benefits of
donna alkaloids. And a good banana flavor to baby any taste.

Donnagel-PG
6FL.OZ.

Donnagel®-PG
Donnagel with paregoric equivalent

Ⓒ V Available on oral prescription or without prescription
under limited circumstances as modified by applicable state law.

Each 30 cc. contains: Kaolin, 6.0 g.; Pectin, 142.8 mg.; Hyoscyamine sulfate, 0.1037 mg.;
ɔine sulfate, 0.0194 mg.; Hyoscine hydrobromide, 0.0065 mg.; Powdered opium, USP, 24.0 mg.
valent to paregoric 6 ml.) (Warning: may be habit forming); Sodium benzoate (preservative),
ng.; Alcohol, 5%. A.H. Robins Company, Richmond, Virginia 23220

A·H·ROBINS

coughs are back....
Robitussin
Robitussin-DM
Robitussin-PE
Robitussin A-C
4 FL OZ
Cough Calmers

clear the tract!

The coughing season is here again. Time to rely on the four Robitussins and Cough Calmers to help clear the lower respiratory tract. All contain glyceryl guaiacolate, the efficient expectorant that works systemically to help increase the output of lower respiratory tract fluid. The enhanced flow of less viscid secretions soothes the tracheobronchial mucosa, promotes ciliary action, and makes thick, inspissated mucus less viscid and easier to raise. Available on your prescription or recommendation.

For coughs of colds and "flu"

Robitussin®

Each 5 cc. contains:

Glyceryl guaiacolate .... 100.0 mg.
Alcohol, 3.5%

For unproductive allergic coughs

Robitussin A-C® Ⓒ

Each 5 cc. contains:

Glyceryl guaiacolate .... 100.0 mg.
Pheniramine maleate .... 7.5 mg.
Codeine phosphate .... 10.0 mg.
(warning: may be habit forming)
Alcohol, 3.5%

Non-narcotic for 6-8 hr. cough control

Robitussin-DM®

Each 5 cc. contains:

Glyceryl guaiacolate .... 100.0 mg.
Dextromethorphan
hydrobromide .... 15.0 mg.
Alcohol, 1.4%

Clears sinuses and nasal stuffiness as it relieves cough

Robitussin-PE®

Each 5 cc. contains:

Glyceryl guaiacolate .... 100.0 mg.
Phenylephrine
hydrochloride .... 10.0 mg.
Alcohol, 1.4%

Robitussin-DM in solid form for "coughs on the go"

Cough Calmers®

Each Cough Calmer contains:

Glyceryl guaiacolate .... 50.0 mg.
Dextromethorphan
hydrobromide .... 7.5 mg.

with the ROBITUSSIN® LINE

Select the Robitussin® "Clear-Tract" Formulation That Treats Your Patient's Individual Coughing Needs:

All 5 Robitussins have an EXPECTORANT-DEMULCENT action. Keep this handy chart as a guide in selecting the formula that provides the *extra* benefits you want for your patient.

Robitussin® extra benefit chart	Cough Suppressant	Antihistamine	Long-Acting (6-8 hours)	Nasal, Sinus Decongestant	Non-Narcotic
ROBITUSSIN®					●
ROBITUSSIN A-C®	●	●			
ROBITUSSIN-DM®	●		●		●
ROBITUSSIN-PE®				●	●
COUGH CALMERS®	■		■		■

A. H. Robins Company,
Richmond, Virginia 23220
A·H·ROBINS

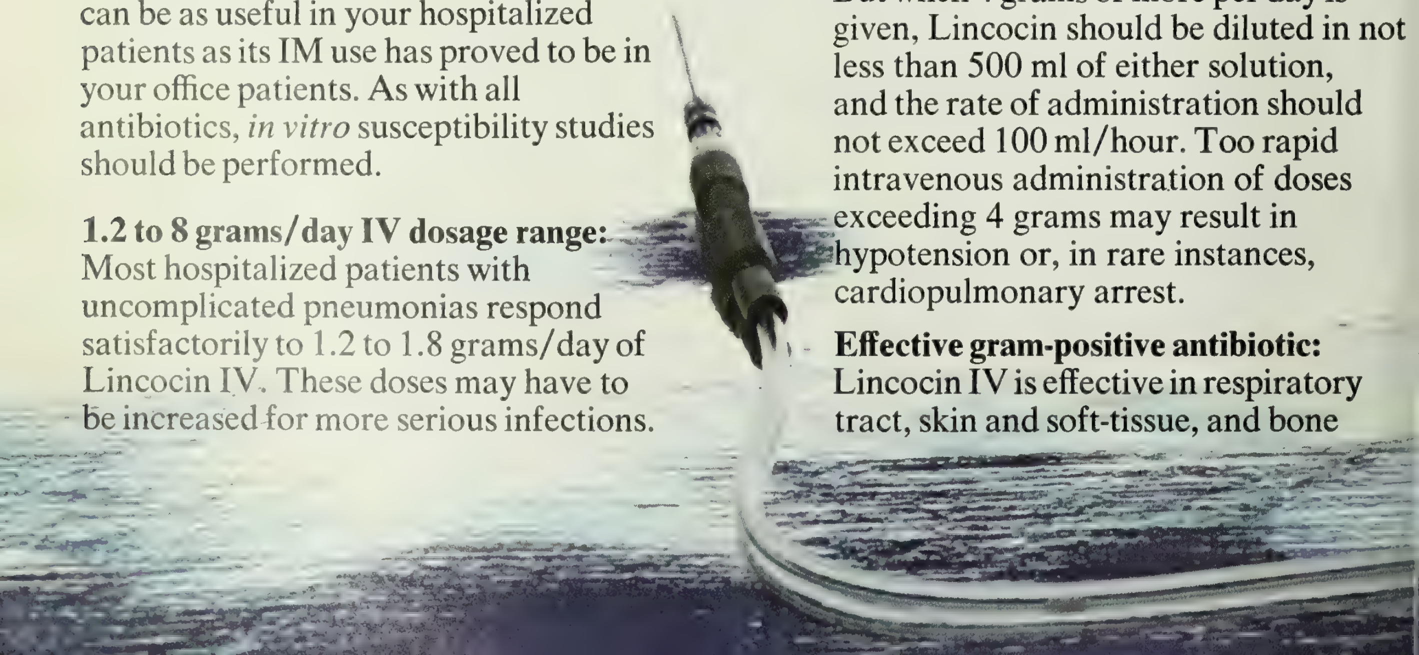
When you select this familiar antibiotic for IV infusion you have available a broad dosage range that hospitalized patients may need.

Intravenous Lincocin (lincomycin hydrochloride, Upjohn), with its 1.2 to 8 grams/day dosage range, covers many serious and even life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. Lincocin IV therefore can be as useful in your hospitalized patients as its IM use has proved to be in your office patients. As with all antibiotics, *in vitro* susceptibility studies should be performed.

1.2 to 8 grams/day IV dosage range: Most hospitalized patients with uncomplicated pneumonias respond satisfactorily to 1.2 to 1.8 grams/day of Lincocin IV. These doses may have to be increased for more serious infections. In life-threatening situations as much as 8 grams/day has been administered intravenously to adults.

In usual IV doses, Lincocin (lincomycin hydrochloride, Upjohn) should be diluted in 250 ml or more of normal saline solution or 5% glucose in water. But when 4 grams or more per day is given, Lincocin should be diluted in not less than 500 ml of either solution, and the rate of administration should not exceed 100 ml/hour. Too rapid intravenous administration of doses exceeding 4 grams may result in hypotension or, in rare instances, cardiopulmonary arrest.

Effective gram-positive antibiotic: Lincocin IV is effective in respiratory tract, skin and soft-tissue, and bone



infections caused by susceptible strains of pneumococci, streptococci, and staphylococci, including penicillin-resistant strains. Staphylococcal strains resistant to Lincocin (lincomycin hydrochloride, Upjohn) have been recovered. Before initiating therapy, culture and susceptibility studies should be performed. Lincocin has proved valuable in treating patients hypersensitive to penicillin or cephalosporins, since Lincocin does not share antigenicity with these compounds. However, hypersensitivity reactions have been reported, some of these in patients known to be sensitive to penicillin.

Well tolerated at infusion site: Lincocin intravenous infusions have not produced local irritation or phlebitis, when given as recommended. Lincocin is usually well tolerated in patients who are hypersensitive to other drugs. Nevertheless, Lincocin should be used cautiously in patients with asthma or significant allergies.

In patients with impaired renal function, he recommended dose of Lincocin should be reduced to 25—30% of he dose for patients with normal kidney function. Its safety in pregnant patients and in infants ess than one month of age has not been established.

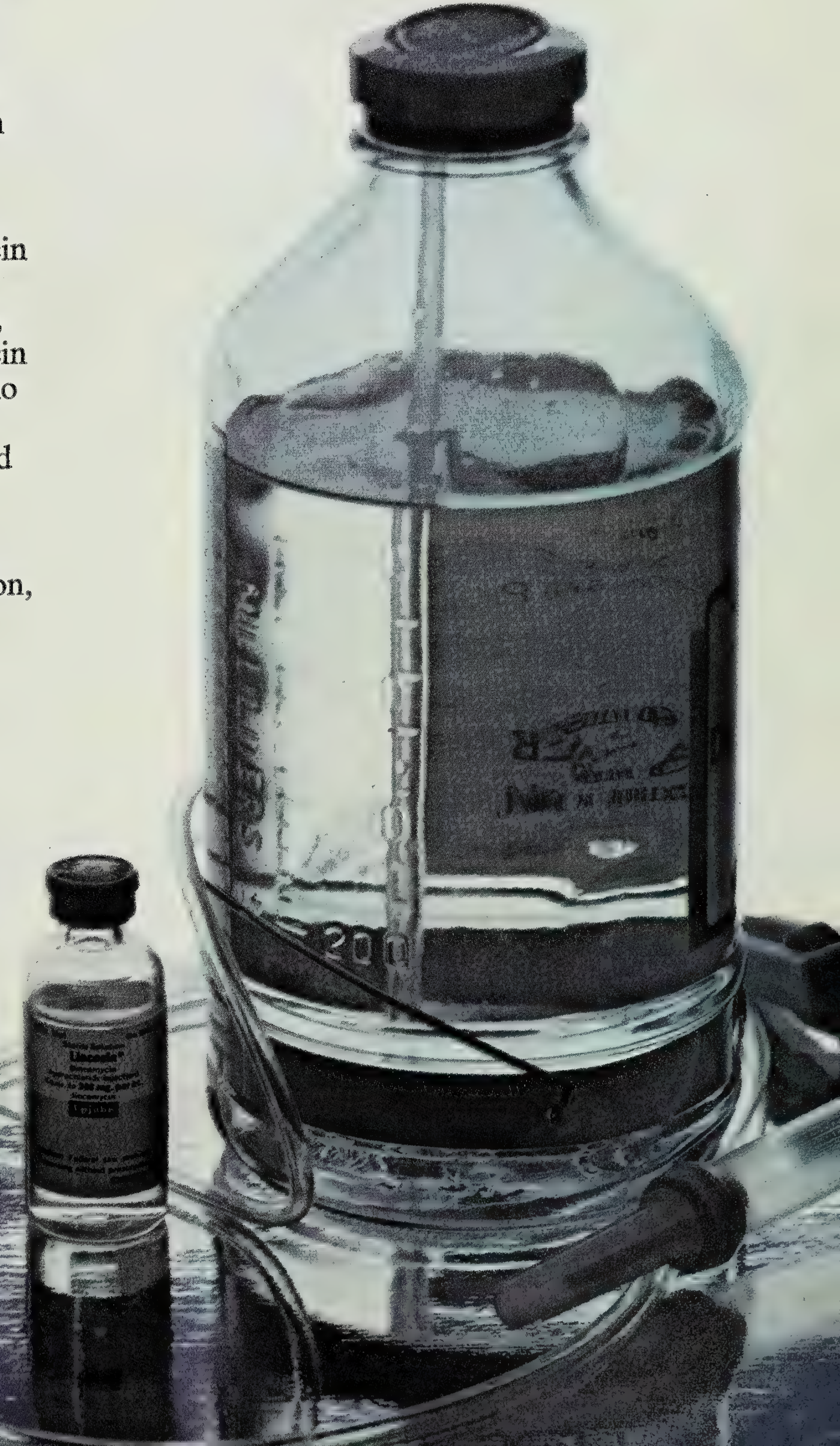
Lincocin may be used with other antimicrobial agents: Since Lincocin s stable over a wide pH range, it is uitable for incorporation in ntravenous infusions; it also may be administered concomitantly with other antimicrobial agents when indicated. However, Lincocin should not be used with erythromycin, as *in vitro* antagonism has been reported.

Lincocin®

Sterile Solution (300 mg per ml)

(lincomycin hydrochloride, Upjohn)

For further prescribing information, please see following page.



© 1972 The Upjohn Company

Sterile Solution (300 mg. per ml.)

Lincocin®

(lincomycin hydrochloride, Upjohn)

Up to 8 grams per day by IV infusion for hospitalized patients with life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. As with all antibiotics, *in vitro* susceptibility studies should be performed.

Each preparation contains:	Lincomycin hydrochloride monohydrate equivalent to lincomycin base
250 mg Pediatric Capsule	250 mg
500 mg Capsule	500 mg
*Sterile Solution per 1 ml	300 mg
Syrup per 5 ml	250 mg

*Contains also: Benzyl Alcohol 9 mg; and, Water for Injection—q.s.

Lincocin (lincomycin hydrochloride) is indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed. Cross resistance has not been demonstrated with penicillin, ampicillin, cephalosporins, chloramphenicol or the tetracyclines. Some cross resistance with erythromycin has been reported. Studies indicate that Lincocin does not share antigenicity with penicillin compounds.

CONTRAINDICATIONS: History of prior hypersensitivity to lincomycin or clindamycin. Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: *CASES OF SEVERE AND PERSISTENT DIARRHEA HAVE BEEN REPORTED AND HAVE AT TIMES NECESSITATED DISCONTINUANCE OF THE DRUG. THIS DIARRHEA HAS BEEN OCCASIONALLY ASSOCIATED WITH BLOOD AND MUCUS IN THE STOOLS AND HAS AT TIMES RESULTED IN AN ACUTE COLITIS. THIS SIDE EFFECT USUALLY HAS BEEN ASSOCIATED WITH THE ORAL DOSAGE FORM BUT OCCASIONALLY HAS BEEN REPORTED FOLLOWING PARENTERAL THERAPY.* A careful inquiry should be made concerning previous sensitivities to drugs or other allergens. Safety for use in pregnancy has not been established and Lincocin (lincomycin hydrochloride) is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infections for 10 days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihistamines available for emergency treatment *Skin and mucous membranes*—Skin rashes urticaria, vaginitis, and rare instances of exfoliative and vesiculobullous dermatitis hav been reported. *Liver*—Although no direct relationship to liver dysfunction is established jaundice and abnormal liver function test (particularly serum transaminase) have bee observed in a few instances. *Cardiovascula* —Instances of hypotension following parenteral administration have been reported particularly after too rapid IV administration. Rare instances of cardiopulmonary arrest have been reported after too rapid I administration. If 4.0 grams or more administered IV, dilute in 500 ml of fluid an administer no faster than 100 ml per hour *Special senses*—Tinnitus and vertigo hav been reported occasionally. *Local reaction* —Excellent local tolerance demonstrated t intramuscularly administered Lincoci (lincomycin hydrochloride). Reports of pai following injection have been infrequen Intravenous administration of Lincocin i 250 to 500 ml of 5% glucose in distille water or normal saline has produced n local irritation or phlebitis.

HOW SUPPLIED: *250 mg* and *500 m* Capsules—bottles of 24 and 100. *Steril Solution, 300 mg per ml*—2 and 10 ml vial and 2 ml syringe. *Syrup, 250 mg per 5 m* —60 ml and pint bottles.

For additional product information, consu the package insert or see your Upjoh representative.

MED B-6-S (KZL-7) JA71-163

The Upjohn Company
Kalamazoo, Michigan 49001

Upjohn

Exceptional group of 17-18 year olds in new U-M program

By Joseph Owsley
U-M Health Sciences Information Service

The youngest group of future physicians ever admitted to a medical school in Michigan began classes Sept. 8 at the University of Michigan.

Fifty bright, exceptionally talented 17- and 18-year-old high school graduates have been admitted to a combined accelerated program of the College of Literature, Science and Arts and the Medical School.

Some members of the pilot program class are expected to earn their MD degree in six years. They will become physicians at age 23.

The program is dubbed "Inteflex" for Integrated, Flexible Premedical/Medical School Curriculum and is funded by a five-year $1.4 million grant from the National Institutes of Health.

The goal of Inteflex is to produce well-rounded, highly trained physicians in less than the traditional eight years of college (usually four years in liberal arts and four years in medical school).

A major benefit of the program, according to George R. DeMuth, MD, associate dean for academic affairs of the Medical School, will be to get doctors into practice earlier, before they are 30.

Under Inteflex, the Liberal Arts and Medical School curriculums will be blended, coordinated and consolidated, offering a smooth transition from basic to clinical sciences while maintaining a strong flavor of humanities and social science courses, said John A. Gronvall, MD, dean and director of the Medical Center.

Students will gradually progress more and more into the Medical School portion of their studies and by the fifth year, at least, will be participating in patient care, as do junior medical students, Doctor Gronvall said.

However, even in their final year of Medical School, Inteflex students will be taking such Liberal Arts courses as philosophy or sociology.

Conversely, first year "freshmen" in the combined program will spend a semester away from the campus, taking a course called "Introduction to Patient Care."

It will involve donning white coats and studying under private physician "preceptors," in their offices and community hospitals all over the state.

There is little doubt in the minds of Medical School faculty that this introductory class of Inteflex has the intellectual fiber to persist through the fast-track program. They say the students are intellectually gifted, energetic, enthusiastic and unusually mature for their age. They represent the best students from high schools in 31 Michigan communities.

Only 10 members of the class are from out-of-state, about the same percentage as in the regular Medical School curriculum. However, 40 percent of the Inteflex group is female, which is almost double the number of women students in regular Medical School classes.

The 50 Inteflex students were selected from 600 applicants and have an average high school grade point average of 3.81 on a 4.0 scale. Ten are perfect all-A students. The average class rank is 97.8 and their combined mean score on the Scholastic Aptitude Test is 1300.

Maturity and career motivation were two of the deciding factors in selecting the Inteflex students, Hinerman said. The Medical School wants to be as certain as possible that the youths will finish the program.

In addition to test scores, reports from their high schools and written statements by the students on why they wanted to become physicians were scrutinized. Two separate interviews were given each of the 161 finalists by faculty members.

Many of the students also demonstrated a remarkable devotion to helping others, according to Dorin L. Hinerman, MD, who has been a member of the medical school admissions committee for 20 years. One girl, he noted, had done really effective work with children in the Detroit ghetto when she was 16. Others have worked as hospital volunteers, as doctors' assistants, as clinic aides and some have done original research in biochemistry.

The "flex" in Inteflex recognizes individual differences, according to Harvey V. Sparks, MD, assistant Medical School dean. The program allows students to progress at their own pace.

Togetherness at the start of Inteflex will be fostered by living arrangements with the U-M's Residential College which has provided dormitory facilities for Inteflex students.

The students also will have many chances to meet with medical faculty members and upperclassmen in non-classroom settings.

Inteflex will also feature a strong, innovative counseling program. "Not enough attention has been given to this in the past," Doctor DeMuth said. "We consider it part of the educational process and will offer our students guidance with both their academic and personal problems."

Doctor DeMuth added that, although the Inteflex program is experimental in nature, the Medical School has no intention of phasing it out.

"By the 1980's, we will be enrolling classes of 300 and I believe Inteflex will be an important part of our efforts to meet this commitment," he concluded.

What do doctors charge for expert testimony?

Members of the Genesee County Medical Society now have a clearer idea of what to charge for medical reports in legal cases or expert testimony they give through depositions or in the courtroom.

The August issue of the GCMS *Bulletin* carries a detailed report of the answers to a questionnaire on medical reports and expert testimony mailed in June to all GCMS members.

At least 70% of the medical society's members are represented in the replies, according to Mark C. Levine, MD, chairman, GCMS Medical-Legal Liaison Committee, and *Bulletin* editor.

"We suspect that the attorneys will accuse us of causing medico-legal charges to rise as a result of this questionnaire," Doctor Levine writes in the August GCMS *Bulletin*. "This may occur in a few cases, but only where individuals have been grossly undercharging for their services to attorneys. At the same time, we hope that the published results of this survey will modify the fees of those practitioners whose charges would seem to be excessive except in the most unusual circumstances."

The report revealed that the average charges for medical legal services by physicians to attorneys in Genesee County is as follows: For a brief report, $25 with a range of 0-$50; for comprehensive reports, $60 with a range of $10-$200; for deposition, $70 per hour with a range of $25-$150 per hour; for courtroom testimony, $90 per hour with a range of $25-$250 per hour. Those physicians who charge extra for preparation of records average $55 per hour for this service.

General surgeon and surgical specialist charges averaged the highest in the group, but the difference was only about $5 or $10 for each item. Family practitioners charge approximately the same amount less per each service. For medical specialists the charges were rather close to the general average. The most common figure for both courtroom and office deposition was $100.

"The report emphasized that the witness and transportation fee given at the time that a subpoena is served, is not all that the medical witness may receive, and the court almost always acknowledges physicians as expert witnesses and allows them to charge accordingly," reports Doctor Levine. "Further, we feel that the subpoena fee does not even cover secretarial time in pulling charts, scheduling the time of court appearance with the attorney's office, and re-scheduling patients and procedures."

Approximately 50% of the respondents in family practice or surgery and related specialties stated that they provided reports or testified more than once per month; 90% of the internists or medical subspecialists were involved less than once a month.

"It was noteworthy that many of the respondents stated that for courtroom testimony, their charges began at the moment they left the office for the courtroom until the moment they returned," reports Doctor Levine.

"We are . . . surprised by the number of individuals who have made only token charges for their services to attorneys on behalf of their patients," he wrote. "Some of the replies suggested a surprising medicolegal naivete on the part of physicians; other doctors were obviously very wise and worldly in legal matters."

MICHIGAN
DEPARTMENT
OF PUBLIC
HEALTH

Monthly Surveillance Report

Cases of Certain Diseases Reported
To the Michigan Department of Public Health
For the Five-Week Period Ending Sept. 1, 1972

	1972 This 5-Week Period	1971 Same 5-Week Period	1972 Total To Above Date	1971 Total Same Date	Total Cases for 1971
Rubella	34	81	1,263	2,617	2,955
Congenital Rubella Syndrome	0	0	0	1	1
Measles	30	81	1,976	2,279	2,659
Whooping Cough	12	29	75	91	140
Diphtheria	0	0	1	0	1
Mumps	73	104	2,693	9,446	10,748
Scarlet Fever & Strep Sore Throat	416	358	8,064	8,147	11,244
Tetanus	0	1	1	2	7
Poliomyelitis (paralytic)	0	0	0	0	0
Hepatitis	360	416	2,888	3,346	4,828
Salmonellosis (other than S. typhi)	96	84	548	454	691
Typhoid Fever (S. typhi)	1	1	6	4	10
Shigellosis	67	22	392	132	295
Aseptic Meningitis	49	35	101	113	239
Encephalitis	15	9	64	83	108
Meningococcic Meningitis	7	3	39	52	64
H. Influenza Meningitis	10	10	55	61	82
Tuberculosis	159	148	1,195	1,240	1,824
Syphilis	460	496	3,356	2,929	4,689
Gonorrhea	2,750	2,311	15,716	14,119	22,115

Information can be supplied by the local health department on the local incidence of disease.

Maurice Reizen, M.D., Director
Michigan Department of Public Health

In small doses

S. Jan Behrman, MD, Ann Arbor, is the recipient of the Wyeth Award for excellence in fertility research. Professor of obstetrics and gynecology at the University of Michigan Medical School, Doctor Behrman was honored at the recent annual meeting in Lansing of the Society for the Study of Reproduction. He is director of the Center for Research and Training in Reproductive Biology at the U-M. He received a plaque and $1,000 from Wyeth.

Benjamin Blum, MD, Petoskey, received a plaque in recent ceremonies honoring him for his distinguished medical service to his community. The award was made by the Emmet County Unit of the Michigan Heart Association, and the Northern Michigan Medical Society.

George M. Brown, MD, Bay City, is the recipient of the President's Award from Downtown Bay City, Inc., for his work with crippled children and adults since 1940.

Jacques S. Gottlieb, MD, Detroit, was honored with the passing of a concurrent resolution June 27 by the Michigan House of Representatives and Senate. The resolution cites his 17 years of service as director of the Lafayette Clinic in Detroit, his research in schizophrenia, his current positions as chairman of the Department of Psychiatry at the Wayne State University School of Medicine and as president of the Society of Biological Psychiatry. "Resolved," said the citation, "that tribute be accorded Jacques S. Gottlieb, MD, for a lifetime of devoted labor in the fields of medical research and medical education."

Thomas E. Gunnings, PhD, East Lansing, is new assistant dean for student affairs in the MSU College of Human Medicine. Doctor Gunnings was assistant director of the MSU Counseling Center since 1969.

Allison B. Henderson, MD, Detroit, a sickle cell anemia researcher, received the National Medical Association's distinguished service award recently at a meeting in Kansas City. Doctor Henderson, a Detroit practitioner in Detroit since 1945, is the owner of a laboratory and is an internist.

G. K. Kemme, MD, Drenthe, was the guest of honor at an open house in mid-August marking his 40 years of general practice. Hostesses were members of his office staff. Doctor Kemme, a Holland, Europe, native, was graduated from the University of Michigan Medical School and at present is the oldest practicing physician in Ottawa County.

(Continued on Page 889)

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The U-M Department of Postgraduate Medicine and Health Professions Education:

A new concept to serve Michigan professionals

By Neal A. Vanselow, MD
Ann Arbor

Since its creation in 1927, the University of Michigan Medical School's Department of Postgraduate Medicine has provided educational programs for physicians and other health professionals throughout the state and the nation.

Under the leadership of such outstanding individuals as James D. Bruce, Howard H. Cummings, John M. Sheldon, and Harry A. Towsley it has developed one of the largest offerings of intramural postgraduate courses and scientific meetings in the country.

Its Affiliated Hospital Program, pioneered by Doctor Towsley, has gained nationwide recognition as an effective method of providing university medical center assistance to community hospitals in the areas of resident and intern training and continuing medical education for attending staffs. The department has traditionally cooperated with the Michigan State Medical Society and other medical schools in Michigan to provide spring and fall postgraduate programs for physicians in smaller communities. In recent years it has coordinated a Kellogg Foundation-sponsored coronary care project which will create over 80 new coronary care unit beds in Michigan hospitals and provide training in modern coronary care to physicians and nurses in those institutions.

Following the announcement in early 1970 that Doctor Towsley would resign as chairman of the Department of Postgraduate Medicine effective June 30, 1971, John A. Gronvall, MD, Dean of the

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Doctor Vanselow is professor and chairman, Department of Postgraduate Medicine and Health Professions Education, University of Michigan Medical School, Ann Arbor.

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Medical School, appointed an Ad Hoc Committee to review the department and make recommendations regarding its future development. This committee, headed by Chris J. D. Zarafonetis, MD, issued its report in July 1971. The committee's recommendations have since been endorsed in large part by the medical school faculty and greatly enlarge the scope of activities of the department.

Indicative of the enlarged responsibility has been action by the University of Michigan Board of Regents to change the department's name from Department of Postgraduate Medicine to Department of Postgraduate Medicine and Health Professions Education. It is anticipated that the reorganization will give the department a greatly increased capability to provide educational programs and services to physicians and other health professionals both in Michigan and throughout the nation as well as increase its capacity to serve the Medical School and the University.

The new Department of Postgraduate Medicine and Health Professions Education will continue to sponsor a large number of intramural postgraduate courses and scientific meetings in the Towsley Center each year. Present plans call for approximately 40 such programs aimed at physicians or at allied health professionals during 1972-73. These programs are coordinated by a new departmental Office of Intramural Education headed by Robert K. Richards. Increasing efforts are being made by this office to define the needs of each group of physician specialists and each type of allied health professional and design courses which will meet those needs.

A second unit of the department, the Office of Extramural Education headed by Roland G. Hiss, MD, has been given responsibility for coordinating Medical Center educational programs conducted in Michigan communities and community hospitals. This office will run the present Affiliated Hospital Program and will maintain liaison with the MSMS Postgraduate Education Committee and with specialty groups throughout the state.

An important additional function of this office is the coordination of Medical Center involvement in Michigan area health education centers. The University of Michigan Medical School is now actively participating in existing or proposed area health educaton centers in Grand Rapids, Kalamazoo, and Oakland County.

These centers, patterned after those described by the Carnegie Commission on Higher Education,[1] will provide clinical training for medical students, graduate training programs for interns and residents, continuing education programs for physicians in the surrounding area, and educational and training opportunities for allied health workers. They provide a unique opportunity for community-based health practitioners to work cooperatively with university medical centers to increase the quality and quantity of health manpower in Michigan.

Three new and exciting functions have been assigned to the department. An Office of Allied Health

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Education, directed by Thomas J. DeKornfeld, MD, has assumed responsibility for planning, development, facilitation, and coordination of all University of Michigan Medical Center programs in allied health education. Doctor DeKornfeld and his coworkers are developing a master plan for future Medical Center involvement in allied health and are exploring the feasibility of a Medical Center educational program to train physician's assistants.

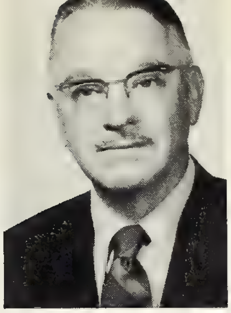
A committee is now looking for a director of an Office of Educational Resources to be based in the department. This office is designed to provide expertise in the process of teaching and learning and in student and curriculum evaluation. The Office of Educational Resources will also provide expertise in the use of audiovisual media for educational purposes. Some of its effort will be devoted to research in health professional education. While many of its activities will be conducted within the Medical Center, it should be able to provide some consultative services to communities, community hospitals, and health professional groups concerned with health education.

A final charge to the department is the development of an Office of Health Care Delivery Research and Evaluation. This office will conduct research in the field of health care delivery, including the study of methods for determining community health care needs, development of innovative health care delivery techniques, and development of methods to better evaluate the quality of health care delivery. A search committee is now identifying candidates to direct this effort.

The resources outlined above should enable the new Department of Postgraduate Medicine and Health Professions Education to effectively continue the tradition of service to the State of Michigan developed by Doctor Towsley and his predecessors. It is anticipated that the department will provide an interface between the University of Michigan Medical Center and Michigan health practitioners, community hospitals, and health education groups so that all parties can more effectively carry out their job of improving health care in our state.

References

1. Carnegie Commission on Higher Education, *Higher Education and the Nation's Health.* (New York, N.Y.) McGraw-Hill Book Co., Oct., 1970.



Doctor Slagle

George W. Slagle, MD, Battle Creek, was honored at a testimonial dinner Aug. 25 at the Drake Hotel, Chicago, for his 20 years with the AMA. Doctor Slagle retired following the AMA Convention this summer in San Francisco after 10 years on the AMA Council on Medical Service. He was honored at the dinner by Russell B. Roth, MD, AMA president-elect, for membership also on the AMA Committees on Insurance and Prepayment Plans, Medical Practice, Government Medical Services, Health Care Financing and other ad noc and liaison committees. He was chairman of the Health Care Financing Committee this past year, and also led the Council on Medical Service in 1966-68. Doctor Slagle continues as an AMA delegate from Michigan. He is a past MSMS president and Calhoun County Medical Society president.

Alexander H. MacGregor, MD, White Pigeon, is president-elect of the American Physicians Art Association. He was elected at the annual APAA exhibition held in conjunction with the AMA Annual Convention recently in San Francisco.

Joseph J. Pitelli, MD, Ypsilanti, is assistant director of clinical therapeutics at the Detroit Research Laboratories of Parke, Davis and Co. Doctor Pitelli is a pediatrician and was in private practice in Cold Spring, N.Y., from 1967 until this year.

Richard A. Rasmussen, MD, Grand Rapids, was honored by the University of Chicago on June 8 when he received the University's Alumni Association Distinguished Service Award.

Julius Rutzky, MD, Royal Oak, director of clinical laboratories at William Beaumont Hospital, Royal Oak, is a new member of the Scientific Advisory Committee of the National Association for Sickle Cell Disease, Inc.

Philip B. Smith, MD, Okemos, is new acting superintendent of Traverse City State Hospital. He was appointed by E. Gordon Yudashkin, MD, director, Michigan Department of Mental Health, as of Sept. 5. Doctor Smith succeeds M. Duane Sommerness, MD, who stepped down from the post to become a staff psychiatrist. Until his appointment, Doctor Smith was chief of the department's bureau of standards and licensing.

Jack Stack, MD, Alma, a leader of abortion reform efforts in Michigan, testified recently before the National Republican Party Platform Committee.

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Minding your business: hiring your next aide

By John Steffen
William Ellerthorpe
Lansing

So you need a new aide, either to augment or to replace current personnel.

Make up your mind that you will take the time to find the right girl. Make sure you know what you are looking for! If you need a general office girl, do not look for a medical secretary or a nurse. It will save you money and time, and make your practice more enjoyable.

List the qualities you want your aide to have, such as basic education, compatability, pleasant telephone voice, typing skills and shorthand. Next, list the duties she will be expected to perform, such as filing, answering the telephone or typing insurance forms.

A written job description is ideal. If you do not have one, you now have a good start toward writing one.

And you should be "willing to train" an experienced girl.

Where do you look? Fve sources come immediately to mind.

1—Your colleagues, who may know of someone with experience who is available or unhappy in their present job situation.

2—Hospital personnel, whose work you are familiar with.

3—Your local unemployment office, which might have some qualified applicants.

4—An employment agency, but contact only one. You will be swamped with calls if several agencies are called, and this prevents a good working relationship with any of them.

5—A properly worded newspaper ad, stating the essential traits you are looking for, such as "should be good with figures" or "must be a fast and accurate typist." Such an ad, including your basic qualifications, works wonders.

After obtaining applicants from one or more sources, you should screen them and set up appointments for interviews.

Start the interview with some informal talk about a subject of mutual interest. Lead in to a description of the job, listing duties and hours to be worked. Be honest so that she is not misled.

Now, find out how she thinks. Ask several leading questions. You might ask her why she is applying for this job, what are her future plans, where she was last employed and what her duties were. What were the other employees like? Is she willing to work irregular hours? Talk only enough to keep the conversation informal and friendly.

If at this point in the interview you feel she merits further consideration, you should go into what you are offering her for the job. Included would be gross salary, fringe benefits such as medical insurance, time off, sick pay, retirement plans, and job satisfactions. Note her reaction! Invite questions.

Converse informally for a few minutes at the end of the interview. The applicant might make comments which reveal characteristics not evident in the formal interview. Also, this will leave the applicant more friendly toward you than if there were an abrupt finish. Tell her you are interviewing a couple more applicants and set a definite time that you will notify her if she is accepted.

Record your impressions immediately after the person leaves. Rate her on the following traits:

A—Voice and speech.

B—Appearance. Give appearance its proper weight but no more.

C—Alertness. How readily does she grasp the meaning of a question?

D—Judgment. Would her judgment be dependable?

E—Emotional stability. How well is she emotionally?

F—Self-confidence. Does she seem uncertain of herself?

G—Friendliness. Is she a likeable person?

After reviewing all applicants, make your decision.

Once hired, let her know that you will review her progress at least twice a year. Each time you should discuss with her what she is doing right and what she is doing wrong. Tell her why she is or is not getting a raise. Be honest with her and keep communication lines open. Your reward will be a smoother running office with less personnel problems.

Mr. Steffen and Mr. Ellerthorpe are with the Lansing office of Professional Management Associates.

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>
> *—George Sarton, from "The History of Medicine Versus the History of Art"*

Are combination drug products useful in treatment involving concomitant use of two or more drugs?

Opinion

Results of a questionnaire to 7,000 physicians:

62.9%
Believe combination drug products are useful.

13.8%
Do not believe combination drug products are useful.

Are combination drug products useful in treatment involving concomitant use of two or more drugs?

Opinion & Dialogue

Doctor of Medicine

Louis Lasagna, M.D.
Professor and Chairman
Department of
Pharmacology & Toxicology
University of Rochester
School of Medicine
and Dentistry

Obviously, many drugs are given concomitantly. Whether it makes sense to combine medications in one preparation, be it capsule, tablet, or liquid, is a question that can be answered only by examining the advantages and disadvantages in the individual case.

Among the advantages is, first of all, convenience. The more medications that are taken concurrently and the more complicated the directions, the less likely the patient is to take medications accurately. From the standpoint of convenience and accuracy, and economy as well, you can make an important case for putting medications together in one preparation, as long as they are compatible.

By the same token, when you prescribe a properly tested and rational combination, you should have less worry about pharmaceutical or pharmacological compatibility – and about reasonable dosage ratios as well. Compatibility of the formulation should be demonstrated in the laboratory and clinic before the product is available for prescription—which is more than can usually be said for the physician's own spontaneous creations. And, the dosage ratios employed in rational precompounded combinations are designed to meet the needs of substantial numbers of "typical" patients.

There is no doubt that many "atypical" patients are to be found, and for them the prefabricated combination must be rejected. But that hardly argues for eliminating rational combinations from the market. Think, for example, of the problems that would arise if the components of widely accepted combinations, like the oral contraceptives and the diuretic-antihypertensives, always had to be prescribed, purchased and ingested separately.

One disadvantage that comes to mind is some doctors' unawareness of the ingredients a given combination contains. For example, a doctor might know that a patient is allergic to aspirin but forget that a certain analgesic mixture, which he knows only by its trade name, contains aspirin. His prescription, then, causes considerable discomfort, to say the least. This problem is a function of physician education, rather than of combination therapy as such. Improving doctors' knowledge about all medicaments they prescribe is a problem that deserves tackling on its own.

Another accusation leveled at combination drugs is that they encourage sloppiness of diagnosis and treatment. In many cases, however, a combination may prove to be the most effective choice. A good example of the usefulness of combinations appears in a recent article in the *Journal of Chronic Diseases* on the efficacy and side effects of an antihypertensive containing three ingredients, in which the track records of the combination drug and the individual ingredients were compared. Interestingly enough, whether the drugs were given individually or together, incidence and severity of side effects were the same. But blood pressure control was invariably better when the drugs were taken in one combination tablet than when they were taken separately (in "titratable" dosage) or in two or three different tablets.

Deciding which combinations constitute rational therapy obviously leads to a discussion of who is to determine which should be used and which should not. Realistically, I think combinations should be evaluated somewhat differently if they are old and established or new and untried.

In today's regulatory atmosphere, there is no possibility of a new combination being put on the market without a substantial amount of acceptable evidence in the form of controlled trials that show it to be safe and efficacious. On the other hand, I believe a different set of standards should apply to combination preparations that have been around for a long time. In other words, physician acceptance over a long period should be given some weight as evidence of the efficacy and safety of these drugs.

The FDA, however, does not seem to share this attitude. It often requires, for these older products, controlled trials that will monopolize the time of already overtired investigators and cost a greal dea
of money. I wish we coul
agree on a "grandfathe
clause" approach to prepa
rations that have been in us
for a number of years an
that have an apparentl
satisfactory track record.

For example, I thin
some of the antibiotic com
binations that were take
off the market by the FD
performed quite well. I ar
thinking particularly
penicillin - streptomyci
combinations that patient
—especially surgical pa
tients—were given in on
injection. This made fo
less discomfort for the pa
tient, less demand o
nurses' time, and fewe
opportunities for dosag
errors. To take such
preparation off the marke
doesn't seem to be goo
medicine, unless actual us
age showed a great deal
harm from the injectior
(rather than the prope
use) of the combination.

The point that should b
emphasized is that ther
are both rational and irra
tional combinations. Th
real question is, who shoul
determine which is which
Obviously, the FDA mus
play a major role in mak
ing this determination. I
fact, I don't think it ca
avoid taking the ultimat
responsibility, but it shoul
enlist the help of outsid
physicians and experts i
assessing the evidence an
in making the ultimate de
cision.

Maker of Medicine

W. Clarke Wescoe, M.D.
President
Winthrop Laboratories

If two medications are ised effectively to treat a ertain condition, and it is nown that they are com-atible, it clearly is useful nd convenient to provide hem in one dosage form. t would make no sense, in act it would be pedantic, o insist they always be rescribed separately. To void the appearance of edantry, the "expert" deries the combination beause it is a fixed dosage orm. When the "expert" nvokes the concept of fixed osage form he obscures he fact that single-ingreient pharmaceutical preprations are also fixed osage forms. By a singular emantic exercise he imlies a pejorative meaning the term "fixed dose" nly when he uses it with espect to combinations. Vhat is ignored is the simle fact that only in the arest of circumstances oes any physician attempt titrate an exact theraeutic response in his paent. It is quite possible hat some aches and pains ill respond to 500 mg. of spirin yet that fact does ot militate against the *usal* dose being 650 mg.

The other semantic ploy ten called into play is to escribe a combination roduct as rational or irraonal.

Take antibiotic mixtures, e source of much of the iticism generated against combinations generally. Obviously, no one should be exposed willy-nilly to the potential side effects of two or three antibiotics when only one is needed. At the same time there are cases where it is prudent to prescribe more than one. The clinician is the judge in these circumstances, as he should be.

There is no clear definition of the word rational. Most persons, I suppose, would find it synonymous with reasonable, but in many circumstances it may best be defined as the opinion of those in power at the moment.

Other factors govern combination therapy, not the least of which has been its broad use by practicing physicians anxious to achieve convenience in prescribing, to reduce medication error, and to save money for their patients. Combinations clearly have met the test on all three counts.

I have been impressed by studies showing that the rate of error climbs markedly with the number of medications to be taken, even with sophisticated patients. When medically justified, therefore, this factor alone supports the logic of combination therapy.

The cost argument for combinations appears to be irrefutable. In 1971, R. A. Gosselin studied the 71 combination products (excluding oral contraceptives) among the 200 most prescribed drugs. The study found that if all 71 products were discontinued, and if each ingredient in these combinations were prescribed separately, the price of medicines to patients would jump by $443.2 million on a national basis! At a time when the cost of medical care is under so much fire, it would be nonsensical to boost costs without clearly irrefutable medical reasons.

The part played by government on this question, of course, is fundamental. The FDA should play a role in determining which combinations are reasonable. That role, as defined by law and regulation, is to ensure that any medication on the market is safe and effective in line with its label claims. Certainly combinations are entitled to as much consideration as single entities – neither more nor less. So long as the addition of one drug to another does not make either less safe, or less effective, so long as they are compatible in a formulation, we have a reasonable product. It makes no sense to recommend the use of two products for certain conditions and to deny their being combined in a single form. An unhappy side effect of the problem concerns the efficacy panel discussions of many products submitted for review. The term "effective, but" has been freely interpreted to mean "ineffective" in toto, regardless of the merit of the individual drugs. This interpretation has placed numerous useful combination products in needless jeopardy.

In reading the actual reports of the review panels, it seems clear that some of the ratings were based less on scientific research and clinical observation than on the "informed" opinions of the panelists. These "informed" opinions were accepted at face value, while the "informed" opinions of others who had used the products were rejected. All of this put combination products into a sort of scientific never-never land.

It should be kept in mind by all, government as well as others involved in our health care system, that advances in therapy are seldom made in leaps and bounds but rather by small painstaking steps—and that some of these steps have resulted from research in combination drugs as well as with single entities. Given the near-infinite biologic variation in patient response, this is hardly surprising to clinicians. It should not be to regulatory agencies either.

In the end, the practicing physician is in the best position to decide if a particular combination makes sense. Such a decision should not be made exclusively by those whose responsibility for continuing clinical care is limited. Clinicians are the best judges of efficacy because the ultimate proof of any product's effectiveness is acceptance by physicians who have observed its actions in patients over time. The corollary statement may be made about over-the-counter medicines, which would not long survive if they failed to afford the relief the user anticipates. That the antihistamine in a "cold" remedy may not *always* be necessary is no reason to proscribe the combination generally.

Opinion & Dialogue

What is your opinion, doctor?
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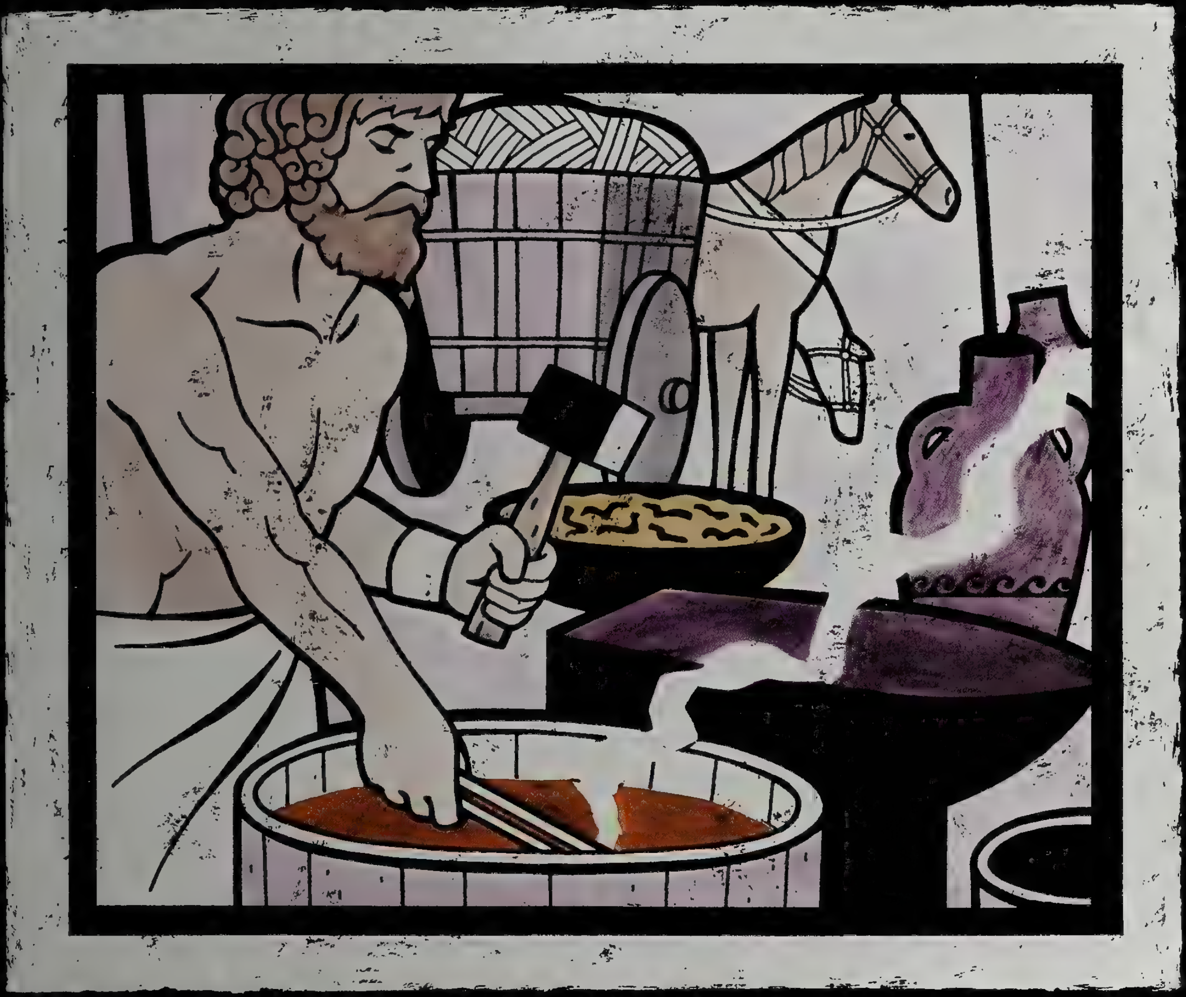
Iron therapy for anemia is almost as old as history itself



Celsus's empirical use of iron

Aulus Cornelius Celsus recommended an unusual form of iron therapy for the treatment of enlarged spleens—the oral administration of water that blacksmiths had used for dousing white-hot iron.

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(See reverse side for prescribing information.)

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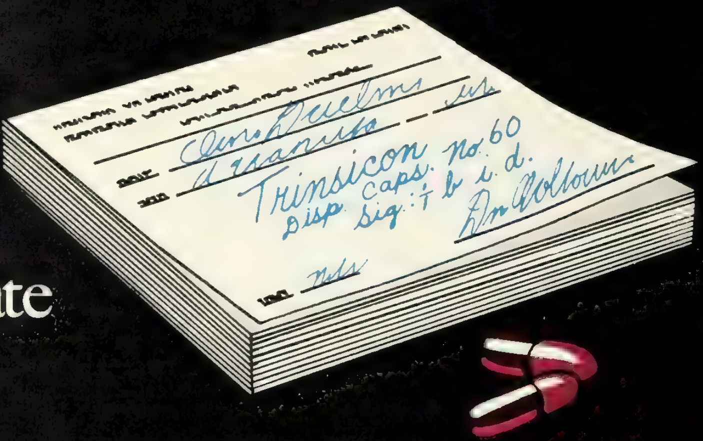
Trinsicon No. 60
Disp. caps.
Sig: i b.i.d.

Description: Each Pulvule® contains—

Special Liver-Stomach Concentrate, Lilly (containing Intrinsic Factor)	240 mg.
Cobalamin Concentrate, N.F., equivalent to Cobalamin	7.5 mcg.
Iron, Elemental (as Ferrous Fumarate)	110 mg.
Ascorbic Acid (Vitamin C)	75 mg.
Folic Acid	0.5 mg.

(The total vitamin B_{12} activity in the Special Liver-Stomach Concentrate, Lilly, and the Cobalamin Concentrate, N.F., is 15 micrograms.)

Indications: Trinsicon is a multifactor preparation effective in the treatment of anemias that respond to oral hematinics, including pernicious anemia and other megaloblastic anemias and also iron-deficiency anemia. Therapeutic quantities of hematopoietic factors that are known to be important are present in the recommended daily dose.

Vitamin B_{12} with Intrinsic Factor—When secretion of intrinsic factor in gastric juice is inadequate or absent (e.g., in Addisonian pernicious anemia or after gastrectomy), vitamin B_{12} in physiological doses is absorbed poorly, if at all. The resulting deficiency of vitamin B_{12} leads to the clinical manifestations of pernicious anemia. Similar megaloblastic anemias may develop in fish tapeworm (*Diphyllobothrium latum*) infection or after a surgically created small-bowel blind loop; in these situations, treatment requires freeing the host of the parasites or bacteria which appear to compete for the available vitamin B_{12}. Strict vegetarianism and malabsorption syndromes may also lead to vitamin B_{12} deficiency. In the latter case, parenteral therapy, or oral therapy with so-called massive doses of vitamin B_{12}, may be necessary for adequate treatment of the patient.

Potency of intrinsic factor concentrates is determined physiologically, i.e., by their use in patients with pernicious anemia. The liver-stomach concentrate with intrinsic factor and the vitamin B_{12} contained in two Pulvules Trinsicon provide 1½ times the minimum amount of therapeutic agent which, when given daily in an uncomplicated case of pernicious anemia, will produce a satisfactory reticulocyte response and relief of anemia and symptoms.

Concentrates of intrinsic factor derived from hog gastric, pyloric, and duodenal mucosa have been used successfully in patients who lack intrinsic factor. For example, Fouts *et al.* maintained patients with pernicious anemia in clinical remission with oral therapy (liver extracts or intrinsic factor concentrate with vitamin B_{12}) for as long as twenty-nine years.

After total gastrectomy, Ficarra found multifactor preparations taken orally to be "just as effective in maintaining blood levels as any medication that has to be administered parenterally." His study was based on twenty-four patients who had survived for five years after total gastrectomy for cancer and who had been taking two Pulvules Trinsicon daily.

Folic Acid—Folic acid deficiency is the immediate cause of most, if not all, cases of nutritional megaloblastic anemia and of the megaloblastic anemias of pregnancy and infancy; usually, it is also at least partially responsible for the megaloblastic anemias of malabsorption syndromes, e.g., tropical and nontropical sprue.

It is apparent that in vitamin B_{12} deficiency (e.g., pernicious anemia), lack of this vitamin results in impaired utilization of folic acid. There are other evidences of the close folic acid-vitamin B_{12} interrelationship: (1) B_{12} influences the storage, absorption, and utilization of folic acid and (2), as a deficiency of B_{12} progresses, the requirement for folic acid is increased. However, folic acid does not change the requirement for vitamin B_{12}.

Iron—A very common cause of anemia is iron deficiency. In most cases, the response to iron salts is prompt, safe, and predictable. Within limits, the response is quicker and more certain to large doses of iron than to small doses.

Each Pulvule Trinsicon contains 110 mg. of elemental iron (as ferrous fumarate) to provide a maximum response.

Ascorbic Acid—Vitamin C plays a role in anemia therapy. It augments the conversion of folic acid to its active form, folinic acid. In addition, ascorbic acid promotes the reduction of ferric iron in food to the more readily absorbed ferrous form. Severe and prolonged vitamin C deficiency is associated with an anemia which is usually hypochromic but occasionally megaloblastic in type.

Contraindications and Precautions: Anemia is a manifestation that requires appropriate investigation to determine its cause or causes.

Folic acid *alone* is unwarranted in the treatment of pure vitamin-B_{12}-deficiency states, such as pernicious anemia. Indeed, the use of folic acid in large doses in pernicious anemia without adequate vitamin B_{12} may result in hematologic remission but neurological progression.

As with all preparations containing intrinsic factor, resistance may develop in some cases of pernicious anemia to the potentiation of absorption of physiological doses of vitamin B_{12}. If resistance occurs, parenteral therapy, or oral therapy with so-called massive doses of vitamin B_{12}, may be necessary for adequate treatment of the patient. No single regimen fits all cases, and the status of the patient observed in follow-up is the final criterion for adequacy of therapy. Periodic clinical and laboratory studies are considered essential and are recommended.

In extremely rare instances, skin rash suggesting allergy has been noted following the oral administration of liver-stomach material. Allergic sensitization has been reported following both oral and parenteral administration of folic acid.

Hemochromatosis and hemosiderosis are contraindications to iron therapy.

Adverse Reactions: In rare instances, iron in therapeutic doses produces gastrointestinal reactions, such as diarrhea or constipation. Reducing the dose and administering it with meals will minimize these effects in the iron-sensitive patient.

Dosage: One Pulvule twice a day. (Two Pulvules daily produce a standard response in the average uncomplicated case of pernicious anemia.)

How Supplied: Pulvules Trinsicon® (hematinic concentrate with intrinsic factor, Lilly), in bottles of 60 and 500 and in Identi-Dose® (unit dose medication, Lilly) in boxes of 100.

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In tubes of 1 oz. and ½ oz. for topical use only.

NEOSPORIN for topical infections due to susceptible organisms, as in impetigo, surgical aftercare, and pyogenic dermatoses.

Precaution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Contraindications: Not for use in the external ear canal if the eardrum is perforated. This product is contraindicated in those individuals who have shown hypersensitivity to any of its components.

Complete literature available on request from Professional Services Dept. PML.

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Contraindications: Hypersensitivity to barbiturates or belladonna alkaloids, glaucoma, advanced renal or hepatic disease.
Precautions: Administer with caution to patients with incipient glaucoma, bladder neck obstruction or urinary bladder atony. Prolonged use of barbiturates may be habit-forming.
Side effects: Blurred vision, dry mouth, dysuria, and other atropine-like side effects may occur at high doses, but are only rarely noted at recommended dosages.
Dosage: *Adults:* One or two tablets three or four times daily. Dosage can be adjusted depending on diagnosis and severity of symptoms.

Children 2 to 12 years: One-half or one tablet three or four times daily. Tablets may be chewed or swallowed with liquids.

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(from the Greek **kinetikos**,
to move,
and the Latin **sedatus**,
to calm)

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until his torso is distended up to
sixty per cent over its normal size...
thus wedging himself tightly
in place and preventing capture.

In memoriam

Jack Bronfenbrenner, MD
Benton Harbor

Jack Bronfenbrenner, MD, Benton Harbor internist, died Aug. 13 at the age of 50.

Doctor Bronfenbrenner was a graduate of Harvard Medical School and was affiliated with Mercy Hospital, Benton Harbor, and Memorial Hospital, St. Joseph. He was a member of the American and Michigan Heart Associations and the American and Michigan Diabetes Societies.

Robert W. Emerick, MD
Fremont

Robert W. Emerick, MD, secretary of the Newaygo County Medical Society, died Aug. 12 at the age of 58. Doctor Emerick also had been a member of the MSMS Committee on Postgraduate Medical Education.

Doctor Emerick was radiologist at Gerber Memorial Hospital, Fremont, and was affiliated with the Big Rapids Community and Reed City hospitals. He was a graduate of Wayne State University School of Medicine.

Doctor Emerick was a member of the Radiological Societies of North America and Michigan, the American College of Radiology, and the Society of Nuclear Medicine. He earned the Bronze Star in service with the Navy during World War II.

Louis J. Gariepy, MD
Detroit

Louis Joseph Gariepy, MD, Detroit surgeon, died Aug. 9 at the age of 82.

Doctor Gariepy was past secretary, U.S. chapter, International College of Surgeons, former member of the State Board of Registration in Medicine and chairman of the Ottawa Indian Foundation.

Doctor Gariepy was graduated from the University of Michigan Medical School and was former chief of staff and head of the surgical department at Mt. Carmel Mercy Hospital. He was attending surgeon at the former Redford branch of Detroit Receiving Hospital and consulting surgeon at Wyandotte General Hospital. In addition, he was surgeon for the Detroit Medical, Surgical Dental group, and founder of Gariepy Medical Dental Clinic.

Doctor Gariepy was re-christened "Sa-gi-ma" by the Ottawa Indians of the Harbor Springs area, where he resided as a youth. His late brother, Bernard F. Gariepy, also was a prominent Detroit area physician.

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Thomas J. Heldt, MD
Detroit

Thomas J. Heldt, MD, long-time head of the Henry Ford Hospital Division of Neuropsychiatry, died Aug. 21 at the age of 89.

Doctor Heldt was former president of the Central Neuropsychiatric Association and twice president of the Michigan Society of Psychiatry and Neurology. He had served also as assistant examiner for the American Board of Neurology and Psychiatry from 1937-1955, and from 1951-1965 as a member of the State Board of Alcoholism.

An Iowa native, Doctor Heldt was graduated from Johns Hopkins University School of Medicine. He was a fellow of the American Psychiatric Association and served as chairman of its committee on Ethics.

Doctor Heldt was the author of numerous scientific articles and is credited with developing the universally standard device for the treatment of lymphedema. He served as a member of the MSMS and Wayne County Medical Society Mental Health Committees.

Sabina Kessler, MD
Bay City

Long-time Bay City generalist, Sabina Kessler, MD, died Aug. 10 at the age of 76. Doctor Kessler and her husband, the late Manasche Kessler, MD, who died in 1971, had practiced together in the Bay City area for 40 years.

Doctor Kessler was a graduate of the Medical School of the University of Vienna. She was affiliated with Mercy, General and Samaritan Hospitals in Bay City.

Doctor Kessler was a past president of the Bay County Medical Society.

G. Thomas McKean, MD
Detroit

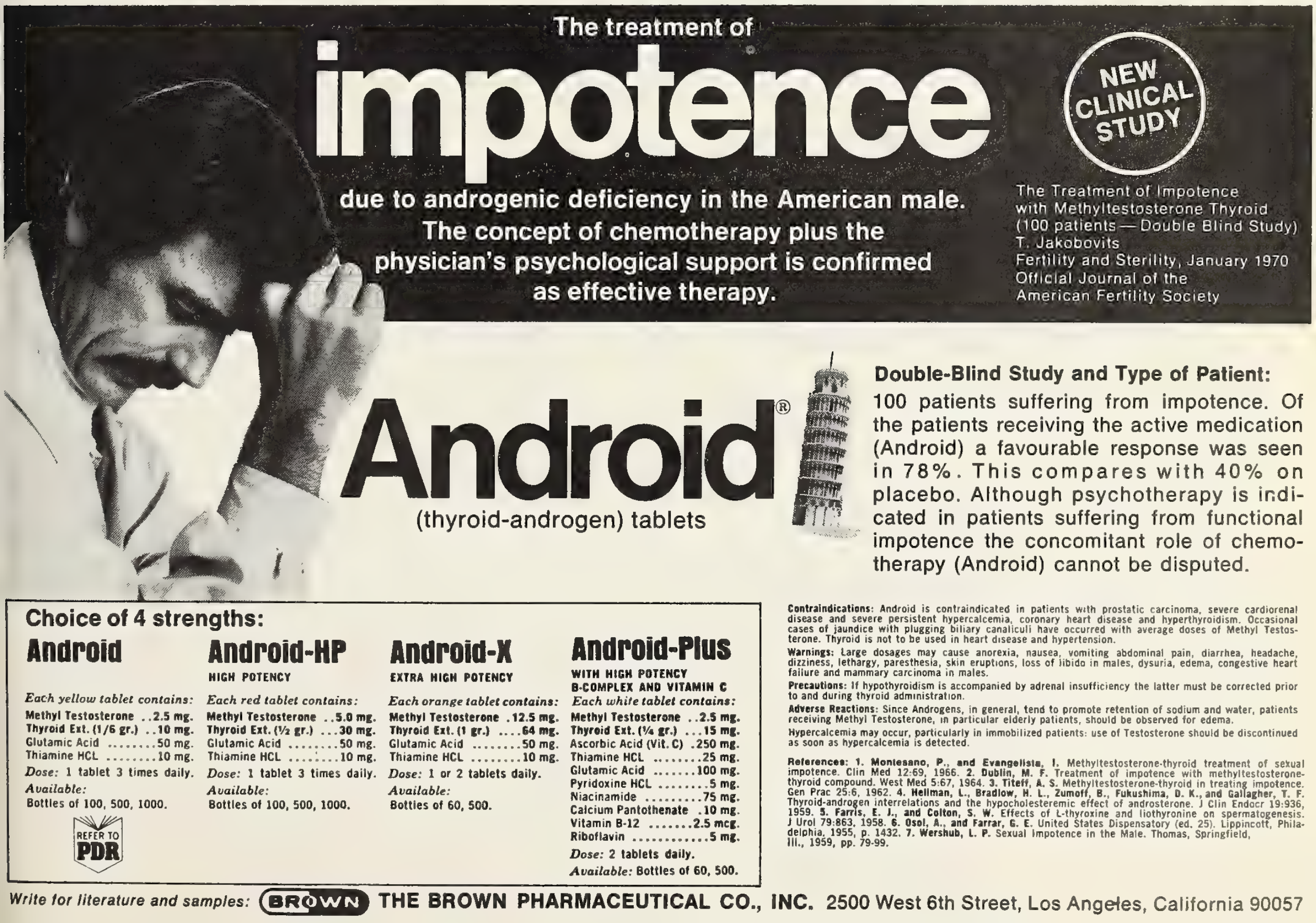
George Thomas McKean, MD, former Michigan Blue Shield president and an MSMS delegate for 14 years, died Aug. 31 at the age of 63.

Doctor McKean served as Blue Shield president in 1959 and 1960, and led the efforts to establish the M-75 contracts.

Doctor McKean served as MSMS delegate from Wayne County from 1948 to 1955 and from 1961 to 1965. At the time of his death he was a trustee of the Michigan Foundation for Medical Education.

The last of a family of Detroit physicians all associated with Harper Hospital, Doctor McKean was former chief of medicine there. He also was a clinical professor of medicine at Wayne State University.

A former member of the State Tuberculosis Sanatorium Commission, Doctor McKean also was



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T. Jakobovits
Fertility and Sterility, January 1970
Official Journal of the
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Each white tablet contains:
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Pyridoxine HCL ....5 mg.
Niacinamide ....75 mg.
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Riboflavin ....5 mg.
Dose: 2 tablets daily.
Available: Bottles of 60, 500.

REFER TO PDR

Contraindications: Android is contraindicated in patients with prostatic carcinoma, severe cardiorenal disease and severe persistent hypercalcemia, coronary heart disease and hyperthyroidism. Occasional cases of jaundice with plugging biliary canaliculi have occurred with average doses of Methyl Testosterone. Thyroid is not to be used in heart disease and hypertension.

Warnings: Large dosages may cause anorexia, nausea, vomiting abdominal pain, diarrhea, headache, dizziness, lethargy, paresthesia, skin eruptions, loss of libido in males, dysuria, edema, congestive heart failure and mammary carcinoma in males.

Precautions: If hypothyroidism is accompanied by adrenal insufficiency the latter must be corrected prior to and during thyroid administration.

Adverse Reactions: Since Androgens, in general, tend to promote retention of sodium and water, patients receiving Methyl Testosterone, in particular elderly patients, should be observed for edema.

Hypercalcemia may occur, particularly in immobilized patients: use of Testosterone should be discontinued as soon as hypercalcemia is detected.

References: 1. **Montesano, P., and Evangelista, I.** Methyltestosterone-thyroid treatment of sexual impotence. Clin Med 12:69, 1966. 2. **Dublin, M. F.** Treatment of impotence with methyltestosterone-thyroid compound. West Med 5:67, 1964. 3. **Titeff, A. S.** Methyltestosterone-thyroid in treating impotence. Gen Prac 25:6, 1962. 4. **Hellman, L., Bradlow, H. L., Zumoff, B., Fukushima, D. K., and Gallagher, T. F.** Thyroid-androgen interrelations and the hypocholesteremic effect of androsterone. J Clin Endocr 19:936, 1959. 5. **Farris, E. J., and Colton, S. W.** Effects of L-thyroxine and liothyronine on spermatogenesis. J Urol 79:863, 1958. 6. **Osol, A., and Farrar, G. E.** United States Dispensatory (ed. 25). Lippincott, Philadelphia, 1955, p. 1432. 7. **Wershub, L. P.** Sexual Impotence in the Male. Thomas, Springfield, Ill., 1959, pp. 79-99.

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founder and past president of the Constantinian Society. He was a graduate of the Harvard University medical school.

"Doctor McKean was a quiet man . . . but his counsel was important," said the Detroit *Free Press* recently. "The names of his father and brother are still on the office door along with his, names that have stood for excellence in Detroit's medical community."

George F. Moore, MD
Richmond

George F. Moore, MD, Richmond ophthalmologist, died July 27 at the age of 83: Doctor Moore was awarded the 50-year pin in 1970 by MSMS and was a past president of the Macomb County Medical Society.

Doctor Moore was graduated from the University of Michigan Medical School and began general practice in Richmond in 1920. He carried on his ophthalmology practice from 1928 until his retirement in 1962.

He was former chief of staff at St. Joseph Hospital, Mt. Clemens and led the first Easter Seal campaign in Macomb County in 1934 and the 1971 campaign.

Bernard M. Murphy, MD
Jackson

Bernard M. Murphy, MD, Jackson physician since 1936, died Aug. 13 at the age of 64.

Doctor Murphy had been an internist in Jackson since 1936 until changing his practice to surgical assistance in 1970. He was a graduate of the St. Louis University School of Medicine.

Bernard W. Robinson, MD
Allen Park

The medical director of the Veterans Administration Hospital in Allen Park, Bernard W. Robinson, MD, died Aug. 23 at the age of 54.

Doctor Robinson had been Allen Park VA Hospital director since 1969, and prior to that served in the same capacity with the VA hospital in Martinez, Calif.

He was a graduate of Harvard Medical College and was former clinical professor of radiology at Yale University School of Medicine and an associate in radiology at the Chicago Medical School.

He was chairman of the radiology section of the National Medical Association, and was a member of the American College of Radiology and the Radiological Society of North America.

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Kellogg Foundation aids minority medical students

The W. K. Kellogg Foundation of Battle Creek has made a grant of $344,000 to National Medical Fellowships of New York City, the only national private agency giving financial help to minority group medical students. Two-thirds of the Kellogg funds will go to medical students at the 40 member schools of the United Negro College Fund. The other third will go to medical students from other minorities.

In 1971, the Kellogg Foundation awarded $457,000 to the UNCF. That grant enabled the UNCF to begin a three-year series of eight-week summer study sessions for freshmen and sophomores from Black colleges, to help them learn about opportunities in medicine.

Your family's share

The proposed 1973 federal budget will cost the average American household $3,681, or 82% more than in 1963, according to the National Chamber of Commerce.

The cost of federal government, alone, will amount to $82 per average household in 1973, or 152% more than the 1963 figure.

Here's proof that fluoridation saves

Michigan parents of children from five through 16 have saved an estimated total of $15 million in dental bills, if their children have been drinking fluoridated water since birth. This breaks down to an average savings of about $46 per child, according to the figures compiled by Dr. Louis F. Szwejda, research and special projects chief of the State Health Department's Dental Division.

New radio program especially for physicians

A new radio program developed especially for physicians is being aired over Detroit station WLDM-FM. Broadcast at 6:30 a.m. Tuesdays in Detroit, the program, "Today in Medicine," is sponsored by Smith, Kline and French pharmaceutical laboratories.

It includes information on research developments, clinical findings, people in the news, advances in therapy and diagnosis and emerging socio-economic trends that influence medical practice. Medical advances will be discussed by the physicians making them and highlights of important medical conferences will be reported.

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Sound Off

Physician can assist employes, employers under new safety act

By S. D. Steiner, MD
Detroit

The Occupational Safety and Health Act of 1970 is a far-reaching piece of legislation which affects all practicing physicians.

Any physician treating a person for an occupational injury or disease must maintain, in a prescribed manner, a record regarding the cause, nature, and severity of the injury or disease. In addition, a judgment must be made as to whether or not the patient is disabled and, if so, the degree and approximate length of time of the disability.

Even though a physician never treats a case of occupational injury or disease he, as an employer, probably will be affected by the act.

As the law is now written, an employer is anyone employing one or more persons. A physician with one or more employes is covered under the Act. As an employer he must provide a safe and healthful work environment and maintain prescribed records in case an employe has an occupational injury or illness. (The current Congress is considering an amendment to the law which would exclude employers with only a few employes.)

The Occupational Safety and Health Act was passed because it was felt there was an excessive amount of occupational injury and illness among the employed and that the federal and state laws relating to safety and health were inadequate. The American Medical Association supported the legislation.

Although the Occupational Safety and Health Act has many facets some of the major provisions are:

1) The Secretary of Labor is responsible for setting and enforcing standards on employers as regards occupational safety and health for the protection of employes;
2) The employer is compelled to provide a working place, conforming to the standards, that is safe and not harmful to the health of employes;
3) Inspection can be made by compliance officers, without prior notice, to investigate workers' complaints as well as make routine inspections;
4) Compliance officers must investigate employe complaints relative to working conditions;
5) The employer must keep in a prescribed form a record of treatment of all occupational injuries or illnesses other than cases described as "first aid";
6) Penalties consisting of citations, fines and under some conditions, criminal action, can be invoked.

Doctor Steiner

Because of the medical provisions of the law, any physician treating an employe for an occupational injury or illness should immediately notify the employer so that proper records can be maintained. The physician should assist the employer by giving him all necessary information he can provide. The record of the case should include diagnosis; cause of injury or illness; whether or not the employe can return to his work; if he is disabled and, if so, degree and expected length of disability. Further, as treatment progresses the degree and severity of the disability must be evaluated on an on-going basis.

The physician can be of assistance in another way. Many employers are searching for advice and help particularly as regards the health aspects of the law. The physician can help by advising the employer of appropriate professional sources such as the Michigan Industrial Medical Association; Michigan Industrial Hygiene Society; Committee on Occupational Health of the Michigan State Medical Society and individual occupational physicians and industrial hygienists.

The Council of Occupational Health of the American Medical Association recently published a "Physician's Guide to the Occupational Safety and Health Act of 1970" which appeared in the February 14, 1972 (Vol. 219 No. 7) issue of *JAMA*. Reprints can be obtained by writing to the American Medical Association.

Although the law has been in effect slightly over a year, it has received much attention. Setting of

(Continued on Page 909)

(Doctor Steiner is medical director for General Motors Corporation of Detroit.)

Physician's charges must rise to meet his costs

By John Anthony, Chief, and Donna Allen
MSMS Bureau of Economic Information

Mrs. Allen

Mr. Anthony

In this day and age, when inflation is such an ever-present component of our daily lives, it is understandable that the public is up-in-arms about the situation. Lately, the largest verbal attack has been against food prices. But a long-standing grudge has been held against physicians who have been accused of raising their fees over the years both indiscriminately and unfairly.

However, one must take into account all of the factors that have contributed to these rises and then realize that they are not as inequitable as many make them seem.

Since the rise in costs has hit every walk of life, it is only natural to say that this is also true for the doctors in our country.

However, the figures for physicians' expenses show this much more dramatically. Three out of five MD's in 1969 in solo practice paid out an average of 14% more in tax-deductible professional expenses than the previous year, or more than double the rate of increase in the over-all cost of living for that year. This trend was expected to continue for at least the next two years. And while physicians' costs rose, net profits did not keep pace. In years past, a doctor's net income rose at a faster rate than his expenses. However, in 1969, the net increased only 10%, while expenses increased 14%.[1]

The average physician who runs his own practice has expenses such as insurance; employees' wages; payroll taxes and fringe benefits; drugs, medical supplies and lab; occupancy, equipment and office; automobile and miscellaneous items.

According to a study done by the Michigan State Medical Society's Bureau of Economic Information in 1971, the cost of running a medical practice increased 39.8% from 1966 to 1970. In 1966 the doctor's costs averaged $22,654, whereas in 1970 they were $31,663—a $9,000 increase in only four years.[2]

It has been said that perhaps the cost of running a doctor's office could be decreased appreciably if he would not purchase so much new equipment that becomes obsolete so fast. But people fail to realize that it is because of this equipment that medical science has progressed.

Actually, very few doctors invest a tremendous amount of money in equipment because it is so readily available at hospitals and clinics; most have just the necessities needed to make valid diagnoses for the majority of their patients.

As can be seen from the above information, a doctor's fees do not equal his income. When one realizes that between 35% and 40%[3] of the revenue he takes in is used for business expenses (and that is not including personal taxes), the amount that he charges his patients can be seen in a different perspective. In any privately-owned business the owner must charge more for his services or products than he has to pay for them in order to make a living for himself—and physicians are no different.

In a recent study done by the Bureau of Labor Statistics, physicians' fees were compared to other workers' wage increases. The following was shown:

Industry	Hourly Earnings % Increase 1965 to 1971
Manufacturing	35.6%
Mining	38.4
Contract Construction	49.7
Transportation & Public Utilities	33.3
Wholesale Trade	38.7
Finance, Insurance, & Real Estate	35.6
Other Services	46.8

During this same time period, doctors' fees increased 39.7%, thus only keeping pace with the higher wages being earned by others.[4]

It has been determined that the average weekly net earnings of a physician are approximately $775.[5] It has also been shown that his average work week is about 60 hours. This comes to an hourly wage of $12.92. The following are the average hourly wages for some types of skilled tradesmen in the Detroit area:

Bricklayers	$10.36/hour
Electricians	10.62/hour
Plumbers	10.28/hour

Thinking of it in those terms, it seems as though the extra $2-$2.50 an hour the average physician makes is not exceptionally unreasonable when one takes into account the years of education and training that go into making him the professional he is.[6]

(As an aside, if an electrician worked 60 hours a week, the same as a doctor, earning double time past 40 hours, he would earn $44,179 per year.)

The idea is that a physician's buying power must remain in proportion to that of other professions

(Continued on Page 909)

Figures don't lie, but . . .

The following editorial is reprinted with permission from the August issue of the MASSACHUSETTS PHYSICIAN.

Many times in recent years we have read that among the industrialized countries of the world, at least 12 have an infant mortality rate lower than that of the United States. This allegation is usually followed by the statement that this country ranks low in the matter of average life expectancy.

It is difficult to believe that those critics who rely on such statistics for their derogatory statements are unaware of the different methods used to report infant mortality in the several countries cited. As a matter of fact, each US state has its own laws and regulations regarding the reporting of neonatal deaths. What is defined as a viable infant with reference to weight and period of gestation varies from one country to another. In Sweden, birth reports are not required until five years after the event. It seems likely that many neonatal deaths go unreported. In many countries, reporting births is the responsibility of parents and there is no compulsion for them to report at all.

Thus the use of infant mortality figures as a measure with which to compare the quality of medical care in one country as against another is not only unscientific, but misleading and dishonest.

It is perhaps too much to believe that the proponents of socialized medicine who compare our infant mortality rate and our average life expectancy with those of other countries realize that the last is necessarily closely related to the first, other factors being equal.

A little simple arithmetic will demonstrate that it requires only 20 neonatal deaths per 1000 births to reduce an average life expectancy from 70 to 68.8 years. Thirty-five neonatal deaths per 1000 births, an approximate figure for Chicago's blacks in 1970, reduces the average life expectancy from 70 to 67.5. So the last allegation is a restatement of the first.

US maternal and infant mortality rates *are* disgracefully high. We believe they would be much higher were it not for the professional expertise and facilities provided for the care of the large number of women admitted in labor to public hospitals without a single prenatal examination. The high rates result from poverty, ignorance, and indifference, not from an inadequate, inequitable, unbalanced medical care delivery system or nonsystem. Failure has existed and still exists but it is basically a socioeconomic not a medical failure.

PHYSICIAN'S CHARGES/Continued

and services. If the overall price index increases, then the doctor must raise his charges just to protect his buying power, as other professionals do. It is therefore unfair to single him out as the culprit.

Footnotes

1. Arthur Owens, "Practice Costs: How High Will They Go?", *Medical Economics,* November 23, 1970, p. 81.
2. *Trends in Overhead Costs of Medical Practice,* September 15, 1971, Bureau of Economic Information, Michigan State Medical Society.
3. Arthur Owens, *op. cit.*, p. 87.
4. Department of Labor, Bureau of Labor Statistics; monthly report, *Employment and Earnings,* chart #353.
5. *Medical Economics,* October 11, 1971.
6. *Research Bulletin,* Michigan State Medical Society, April, 1972.

NEW SAFETY ACT/Continued

satisfactory safety and health standards and conforming to such standards has been controversial. Large industrial employers, through their safety and medical departments, have the resources for coping with the law. However, the small employer with no or limited safety and medical service needs information and help. Therefore, the practicing physician can be of much assistance and should provide information and help to the degree to which he is capable.

Improving hospital effectiveness —two views

By Karl G. Klicka, MD
Wayne

During the next decade the field of hospital administration will encourage changes that will alter not only the pattern of operations in hospitals, but also the manner in which these institutions are governed and organized.

There is little doubt that many of the modern "management tools" that industry has developed will be implemented in health facilities.

Advanced industrial and systems engineering methods will be introduced and utilized in order to effectively manage the hospital's sophisticated equipment and to maximize the potential input of the institution's growing personnel complement.

Productivity and management performance will also be improved by the introduction of advanced budgeting techniques and a revised reimbursement

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(Doctor Klicka is executive director of the Peoples Community Hospital Authority.)

Doctor Klicka

scheme. However, the most significant improvement in the internal management process will probably be derived from the efficacious use of computer technology as applied to not only the business oriented data processing requirement, but also its application in other areas such as the laboratory and the pharmacy.

Thus, we should expect a number of developments which affect the manner in which health care institutions are operated, but it is apparent that increasing personnel productivity and improving management performance, although desirable goals and an important objective, won't be enough to make a significant reduction in the cost of hospital care. Fundamental and widespread changes in the hospital system are needed to accomplish this.

The long-endured situation that has permitted competing hospitals to serve the same service area is now being recognized as wasteful. Only too frequently a hospital has added a service merely because its competitor has offered it, with the result that the service in both hospitals has been underutilized, resulting in a high unit cost of service rendered.

Shared services, consortiums, and mergers, offer the greatest potential for cost stabilization and, possibly, even a cost reduction. The fear that these organizational changes would lead to monopolistic situations in communities should not be a concern. It will be prevented by newly constituted boards of directors whose membership is made up of community representatives, carefully selected to assure balance. These boards should include professionals as well as non-professionals in their makeup. The centralization and consolidation of administrative and professional services with emphasis on improved management technologies throughout the organization will lead to desirable economies.

Historically, in the development of hospitals, religious as well as secular groups were necessary to organize hospitals. Philanthropists on boards were essential to donate the money necessary to pay for the care of the poor. But the development phase is over and behind us. Hospitals today must be community owned and operated, and indigent and educational costs must be borne by tax revenue. Capital financing likewise should be based on tax revenue—Authority and District hospitals have proven the value of this course. The Comprehensive Health Planning organizations that took form and grew during the past decade should now be able to begin to contribute to the process of rational health facility planning.

The solution to providing high quality medical care at a reasonable cost will not only be found in applying better institutional management techniques, but also through an improved total hospital system.

Doctor Simoni

By Lewis E. Simoni, MD
Flint

How can we change the hospital scene to develop effectiveness? In essence, provide for performance, productivity, validity, and potency.

Historically, hospital administrators have generally been the most influential on the hospital scene. I think it is time that hospital administrators also view themselves as catalysts, bringing together the board of trustees, nursing directors, medical staff and ancillary personnel into a magnificent and stable compound for effective patient care.

Furthermore, medical staffs in general have not assumed their full responsibility in patient care. There is a basic correction in the delivery of medical care that must be made. The one-to-one confrontation of patient to physician is an honored method for the delivery of medical care. It is a difficult one to change.

Hospitals and physicians, when providing care, find themselves using most of their resources providing for patients who literally "show up" on the scene.

This consideration of the "first point of contact" is an important one. It cannot always be on hospital ground. It cannot always be a physician.

Where does nursing service come into these discussions on hospital effectiveness? I'm naive enough to suggest their presence on the Joint Conference Committee and even their presence at some Trustee deliberations.

I would further suggest that nurses be the right hand of the physician and not that of the administrator in matters of patient care.

Many in-service programs must change and have an effective physician influence in the casting of future nurses. If the nursing directors are interested in hospital effectiveness, then they must devise methods and manners where the orders of physicians can be done quickly, efficiently, and accurately. The physicians and nurses must work together for early diagnosis and effective treatment in order to promote desired results.

Then, can you imagine the impact of a hospital board which brings forth a philosophy of medical care for its community, and a strong plan of attack for the providing of that care? Even though the hospital represents the ultimate care in that community, it, at the same time, must be responsive to the need for lesser degrees of care that could be provided through specialized sub-acute medical care facilities, clinics, out-patient services, etc., centrally located or planned as viable satellites.

(Doctor Simoni is president of the staff, St. Joseph Hospital, Flint.)

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ATE NEWS FROM THE MICHIGAN STATE MEDICAL SOCIETY

Michigan Medicine

October 31, 1972, Volume 71, Number 31
Michigan State Medical Society
Reading Time: 2 min. 50 seconds

RETROACTIVE MEDICAID FEES are assured doctors who sign and submit the Physician and Dentist Identification Form" to the Michigan Department of ocial Services.

The Department says it will honor all Medicaid billings beginning with he State takeover of fiscal operations whether or not the physician at that ate was enrolled (August 1 for Genesee, Ingham and Eaton counties and Oct. 1 or the rest of the state).

Billings for Medicaid services for any time in the two years preceding the tate takeover may be submitted to Blue Shield until December 1. Between Dec. and Jan. 1 such statements should be submitted to the Department of Social ervices for payment. After January 1 only services provided in the pre-eding 12 months will be honored and must be forwarded directly to the Dept. f Social Services. Exceptions may be made if there have been extenuating ircumstances where billing has been tied up because of third-party billings.

In completing forms for retroactive service billings, doctors are reminded hat the patient's signature is no longer required.

THE NEW MEDICAID INVOICES are being mailed as quickly as possible by the State Department of Social Services to Michigan physicians who are sending in the new "Physician and Dentist Identification Form." The new form, which replaces the broad provider agreement that MSMS objected to, was sent recently to all licensed doctors with covering letters from MSMS and the State Dept.

The State Dept. letter explained that physicians who had signed the original provider agreement need not send in the new form. The identification number assigned then to the physician is being continued. Physicians who resigned or never signed before are asked to send in the new Identification form if they wish to be reimbursed for services provided Medicaid patients.

Until this new form was approved, MSMS was advising members to use the old Blue Shield Medicaid vouchers. These should not be used.

The MSMS Liaison Committee and the Governor's Liaison Committee will meet soon to continue to discuss changes sought by MSMS in the invoice and the operation of the program.

HR1 - THE OMNIBUS federal Social Security bill compromised and passed in he last moments of the 1972 Congress - contains more than 100 changes in edicare, Medicaid and Maternal and Child Health laws.

At this writing the President has not signed the bill, though he is ex-ected to.

A complete summary of the medical-health provisions of HR1 appeared in he Oct. 26 issue of the American Medical News.

Many of the changes are of significant interest to physicians. Medicare overage will be extended to an estimated 1.7 million disabled persons who eceive cash benefits under the Social Security or Railroad Retirement rograms. The Part B monthly premium for Medicare beneficiaries was set t $5.80 a month for fiscal 1973 (compared with $5.60 currently) and Part deductible was increased from $50 to $60. Persons over 65 years not resently eligible for Medicare will be given the opportunity to buy Part coverage for $33 a month, with Part B coverage being mandatory. Reimburse-ent for reasonable charges will be limited to the higher of the prevailing charge on Dec. 31, 1970, or the prevailing charge level that would cover 75% of the customary charges made for similar services in the same locality in the base year preceding. Limitations are placed on future increases in reimbursement for physician services and are to be based on economic changes. The Health Insurance Benefits Advisory Council was instructed to study alternative methods of reimbursement for physicians under Medicare and make appropriate recommendations.

THE MSMS NEW CAR LEASING program is off to a good start. Several lease agreements have been signed and many are in process. Besides enjoying low rates, lessees qualify for discounts on tires, parts, etc. For further information, phone McCullagh Leasing, Inc., (313) 294-7800.

MSMS MEMBERS may present their suggestions to improve the AMA by testifying at the open hearing scheduled by the AMA Council on Long Range Planning and Development from 1 to 6 p.m., Nov. 27 at the Netherland Hilton Hotel, Cincinnati, in connection with the AMA Clinical Convention there. Oral testimony will be accepted first from doctors who submit written statements and request an appearance before the Council; and others will be heard at the end of the scheduled presentations. The Council held a similar hearing in Detroit at the MSMS Annual Session October 2.

HOW MANY GROUPS IN MICHIGAN? Michigan, according to figures obtained from the AMA Center for Health Services Research and Development, had 260 medical groups in 1969, the latest statistics available. Of these, 156 were single specialty groups, 80 were multispecialty, and 24 were general practice. These groups included a total of 1,215 physicians. In the nation in 1969 there were 6,371 medical groups involving 40,093 doctors. Of these, 3,169 were single specialty groups, 2,418 multispecialty, and 784 general practice

THE MATERNAL AND CHILD HEALTH Service of HEW's Health Services and Mental Health Administration has published a booklet describing sickle cell anemia, its effects, how it is discovered, what care should be given, the carrier state, etc. The booklet stresses the importance of educational efforts, specifically with the black population, of whom an estimated 25,000-50,000 have the disease. Direct inquiries to Maternal and Child Health Service, Department of Health, Education, and Welfare, Parklawn Building, 5600 Fishers Lane, Rockville, Md 20852.

THE MSMS SKI CLUB IS planning a trip to Aspen, Colorado, March 10-17, 1973. The trip will include a charter flight from Detroit to Grand Junction, bus to Aspen, lodging at the Continental Inn, breakfast and lift tickets for $325 per person. First come, first served. Those interested, please contact Thomas Berglund, MD, MSMS Ski Club, Box 950, East Lansing 48823.

October 31, 1972 Vol. 71, No. 31

Michigan Medicine

MICHIGAN STATE MEDICAL SOCIETY

Published three times each month and four times in December and January, 38 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Mich. and at additional mailing offices. Yearly subscription rate, $9.00. Printed in USA. All communications should be addressed to the Publications Committee, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. © 1972 Michigan State Medical Society. Phone: Area Code 517, 337-1351.

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OFFICIAL JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY • VOLUME 71, NUMBER 32 • NOVEMBER 1972

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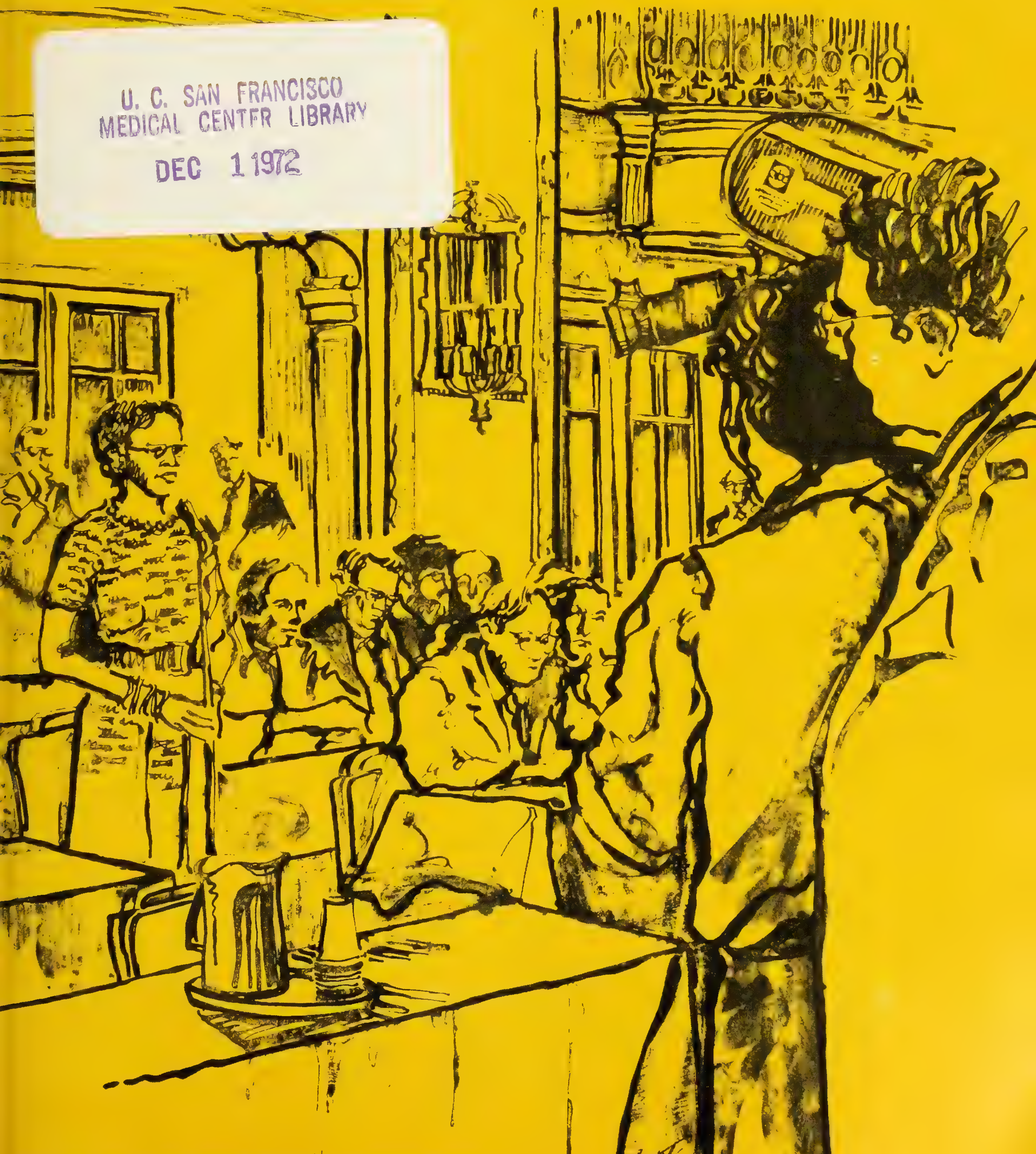

ABC film crew tapes MSMS House of Delegates debate on abortion law reform during 1972 Annual Session.

The negative power of clinically significant anxiety
in angina pectoris...
This man feels he is living
on borrowed time.

During anginal attacks, patients may suffer intense apprehension. More frequently, however, they experience a continuing sense of less severe but nonetheless disproportionate anxiety.

Reduction of such clinically significant anxiety is important, since undue emotional stress may precipitate further anginal episodes.

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Librium (chlordiazepoxide HCl) is used concomitantly with certain specific medications of other classes of drugs, such as cardiac glycosides, diuretics and antihypertensive agents, whenever anxiety is clinically significant. The drug should be discontinued after anxiety has been reduced to appropriate levels.

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for moderate to severe anxiety accompanying angina pectoris

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of anxiety and tension occurring alone or accompanying various disease states.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido — all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Supplied: Librium® Capsules containing 5 mg, 10 mg or 25 mg chlordiazepoxide HCl. Libritabs® Tablets containing 5 mg, 10 mg or 25 mg chlordiazepoxide.

*Levine, S.: "Angina Pectoris and Emotional Overlay," Scientific Exhibit presented at the Annual Meeting of the Maine Medical Association, Kennebunkport, Me., June 13-15, 1971.

A copy of the Levine study may be obtained from your Roche representative.

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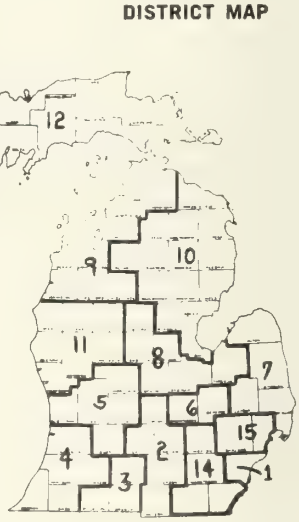

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President's page

MSMS members—you're challenged!

John J. Coury, MD
MSMS President

Often, traveling about the state, I've asked myself:

Where are we going?

Are we making progress?

Have we made progress?

What are our goals and purposes for the future?

What really are our responsibilities to our patients and colleagues?

Are we meeting our obligations?

When I look back over the last 10-12 years, I can truthfully say that much progress has been made by your State Medical Society. We have been an active organization, responsive to our patients and our colleagues. Many of our critics deny us this, stating that we are moving too slow. Others state we are moving too fast.

Though we have gone forward, we have further to go. Forward in a constructive, reasonable and responsible fashion. Not an irrational and irresponsible pace as some would have us do.

We need input from every physician in this organization! Every member of our profession in this state should be a member of this organization.

We are all individuals and many times permit our individualism to override the common good of our organization.

When we were given life on this earth, we were destined to be "individuals." Since that birth, we have been continuously groomed to be "individuals," to be independent thinkers and to make difficult decisions of life and death. As doctors, we have been challenged by the most horrible of diseases and the most gruesome of accidents.

This individuality has made us strong and capable. This has been good for our patients and has made us a strong profession, envied by many. But this same strong individuality has been a deterrent in our being as strong and unified a profession as we should be.

There is no question that we are in this profession because we are "individuals." Individuals, strong enough to make difficult, important decisions.

However, in our own democratic organization when our goals are common in nature, our individualism must be tempered with reasonableness, and for this I plead to you. We cannot afford the luxury of individualism in an organization that has a common goal for all. In a democratic organization when a majority decision is reached, then I feel it is the responsibility of all members of this Society to work toward the common goal. We may retain our individual differences, but we cannot permit parochialism, or fractionalization of our members to the detriment of the profession as a whole: to the detriment of our patients!

In this respect, we must work toward a common goal.

We must dedicate our future to recruitment and unity. All of our profession must be brought into the mainstream of medicine. For only with a strongly organized and unified medical profession can we deliver the highest quality of medical care.

If we permit others than physicians to direct the course of medical care for the future, then we can surely expect a rapid decline in the quality of medical care that will be delivered to our patients. History has taught us this. Let us remember it!

The high quality of medical standards in this country was originated and amplified by organized medicine, the AMA, MSMS and county societies.

I repeat, to maintain our high quality of medical care, we *must* devote our efforts to recruitment and unity with the end result being a strongly organized democratic society.

Therefore, I give you these challenges—

I challenge you to become more involved.

I challenge you to get the uninvolved involved.

I challenge you to make members of nonmembers.

I challenge you to work for the common goal in a democratic organization.

I challenge you to improve your personal image—not matter how good it may be.

I challenge you to help unify our profession.

It will require hard work from all of us.

I am willing!

Are you?

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COVER—On Tuesday morning, Oct. 3, a seven-man ABC film crew from New York video-taped several MSMS delegates as they debated support of abortion law reform in the 1972 House of Delegates meeting. The film, they said is to be part of a TV documentary to be aired in December. Sketch by MSU artist Bob Brent.

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Publication of **Michigan Medicine** is under the direction of the Publication Committee, Michigan State Medical Society. The scientific editor is responsible for the scientific content. The managing editor is responsible for the production, correspondence and contents of the journal. He and the executive editor share final responsibility of the entire publication.

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4. Articles should ordinarily be less than four printed pages in length (3000 words).
5. References should conform to *Cumulative Index Medicus*, including, in order: Author, title, journal, volume number, page, and year. Book references should include editors, edition, publisher, and place of publication, as well.
6. The editors welcome, and will consider for publication, letters containing information of interest to Michigan physicians, or presenting constructive comment on current controversial issues. News items and notes are welcome.
7. It is understood that material is submitted for exclusive publication in **Michigan Medicine**.

MICHIGAN MEDICINE is the official organ of the Michigan State Medical Society, published under the direction of the Publication Committee. Published three times a month, except four times in December and January, 38 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Mich. and at additional mailing offices. Yearly subscription rate, $9.00; single copies, 80 cents. Additional postage: Canada, $1.00 per year; Pan-American Union, $2.50 per year; Foreign, $2.50 per year. Printed in USA. All communications relative to manuscripts, advertising, news, exchanges, etc., should be addressed to Judith Marr, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. Phone Area Code 517, 337-1351.

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1972 Annual Session Scrapbook

The dramatic highpoint of the 1972 MSMS House of Delegates meeting Oct. 1-3 in Detroit came when Brooker L. Masters, MD, right, newly-chosen president-elect, was escorted to the front of the assembly. Leading the way was MSMS Past-President Harold H. Hiscock, MD, Flint, who served in 1970-71.

The past-president's pin, honoring him for his just-completed year of service, was presented to Sidney Adler, MD, Detroit, right, with respect and good wishes from Vernon V. Bass, MD, Saginaw, Speaker of the MSMS House of Delegates.

The symbol of authority, the gavel, was passed from Brooker L. Masters, MD, Fremont, right, retiring MSMS Council chairman, to Robert M. Leitch, MD, Battle Creek, elected Council chairman Oct. 3 in Detroit. New Council vice chairman is Brock E. Brush, MD, Detroit, left.

Adding a surprise touch to the installation dinner for John J. Coury, MD, Port Huron, left, new MSMS President, Doctor Adler presented Doctor Coury with a specially-designed, solid silver chain of medallions engraved with the names of all MSMS Presidents since the founding of the state society.

Members of the MSMS staff were on hand during the Scientific Sessions Oct. 3-5 to answer questions about MSMS asked by visitors to the exhibits area. Herbert Mehler, MSMS chief, Research and Analysis, Government Medical Care Programs, talked one afternoon with, from left, Mrs. Shafarman, E. M. Shafarman, MD, Detroit, and David Penner, MD, Detroit.

The MSMS House of Delegates elected three new members of The MSMS Council, who are, from left, Leland E. Holly, II, MD, Muskegon; Paul T. Lahti, MD, Royal Oak, and Robert M. Stow, MD, Lansing.

The Detroit Press Club was the scene of news luncheons Monday, Wednesday and Thursday during the Annual Session. At one, Robert E. Rakel, MD, Iowa City, second from right, Annual Session speaker, talked with, from left, Charles Downs, MSU College of Human Medicine Information Services; George Dean, MD, president, Michigan Academy of Family Physicians, and Jack Pickering, Detroit freelancer.

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Retiring members of the Michigan Blue Shield Board of Directors were honored for their service with the presentation of plaques by Board Chairman Robert H. Hamburg, MD, Detroit, second from right. From left, the physicians are Roy G. Gerard, MD, Saginaw, Paul T. Lahti, MD, Royal Oak and Adrian J. Neerken, MD, Kalamazoo.

Max Parrott, MD, Chicago, an AMA trustee, left, was welcomed to the MSMS Annual Session by Donald N. Sweeny, Jr., MD, Detroit, member of the AMA Council on Medical Service. Doctor Parrott presided at a hearing when MSMS members had the chance to speak out on AMA policies.

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Meet Doctor Coury, the man

John J. Coury, MD, the Port Huron surgeon serving as president of MSMS this year, has said many times in taking office that his goal is to unify the physicians of Michigan.

He means it.

"I think we can do it," he said in an interview Oct. 3 in Detroit, the day he was sworn into office. "At least I'm going to give it a try, at least get the wheels rolling."

His plans are to get out and meet MSMS members, attend as many county society meetings as possible, and to meet also with medical students, hospital staffs and specialty organizations.

His first meeting with medical students is already arranged at Michigan State University, where he will discuss established medicine with freshman medical students.

"If we can start meeting now with medical students, I think it will make it easier for us in the future," he says.

Doctor Coury also revealed hopes to get the Michigan peer review foundation "out of limbo" and to see a little more restructuring of the state medical society during his year as president.

He brings to the challenge a broad background of administrative experience.

A graduate of Western Reserve University medical school, he served as a captain in the U.S. Army Medical Corps during World War II. He is a member of the boards of directors of Michigan National Bank and the local United Community Fund and is an advisory trustee of the Port Huron District Foundation.

Doctor Coury has been a member of The MSMS Council for 12 years, a member of the Michigan State Board of Registration in Medicine seven years and also serves as a member of the board of directors of the Midwest Alumni Council of Washington-Jefferson College, where he obtained his undergraduate degree.

He is a delegate from Michigan to the AMA, a member of the Michigan Association of the Professions, a diplomat of the American Board of Surgery, a fellow of the American College of Surgeons and a member of the Detroit Academy of Surgery.

Doctor Coury

Doctor Coury concentrates on pediatric and abdominal surgery and is affiliated with Port Huron General and Mercy Hospitals in Port Huron, being a former chief of staff and chief surgeon at the latter.

Doctor Coury, a native of Wheeling, W. Va., and his wife, Doris, who was born in Three Rivers, have three children, Jane Ann, a graduate of the University of Colorado and Michigan State University; John A., a junior at Notre Dame University, and Thomas A., a freshman at Notre Dame.

Safety glass law passes; pediatricians pleased

The passage of Michigan law requiring the use of safety glass in hazardous locations in all new and remodeled homes and buildings brings happy and grateful response from Robert H. Chesky, MD, Ann Arbor.

In an editorial in the July issue of *Michigan Medicine,* Doctor Chesky, chairman, Committee on Legislation, Michigan Chapter, American Academy of Pediatrics, called on physicians to urge the replacement of unsafe glass with safe glass in all areas where children, in particular, can be injured by broken, jagged panes.

"The bill, signed Oct. 11 by Governor Milliken, passed in the form we've basically advocated all along," said Doctor Chesky. "We're very happy with it."

He added, however, that his committee has a few concerns that under the new law, "you're going to have to break glass to have it replaced."

"We wonder," he said, "if it would not be more useful to oblige certain places frequented by children to replace unsafe glass within a reasonable time.

"But we are basically happy with the new law," he said. "And we are indebted to *Michigan Medicine* and the Michigan State Medical Society to allow us the forum of the July issue."

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Highlights of Sept. 13, 1972 meeting — The MSMS Council

The MSMS Council on Sept. 13

. . . VOTED TO INSTRUCT the Ad hoc Medicaid Negotiating Committee to confer again with the State Department of Social Services and to make three requests. A motion was adopted that The Council would encourage members to participate in the new Medicaid program if the state would return to the per-case agreement pattern and would change Items 18 and 34 of the invoice. Many council members, some component societies and many physicians have voiced their objection to the one-time provider agreement form.

. . . APPROVED the State Health Department's preventative program of screening and follow up for children in the Medicaid program, declared to be in full support of previous MSMS positions. Component medical societies were urged to work jointly with county health departments to implement.

. . . ENDORSED the consumer-oriented health conferences planned by B-level comprehensive health planning agencies in late October.

. . . AGREED that The Council should introduce a resolution to the House pointing out that when any physician signs out he must designate an individual physician to care for his patients and that he cannot sign out to an emergency room service.

. . . ADOPTED FOUR POSITIONS regarding future annual sessions of MSMS: The Council (1) would prefer House sessions in first half of October, (2) would prefer The House and Scientific Session be kept together as long as feasible, (3) would consider Grand Rapids and other cities for future meetings; and (4) The Council asked Director Tryloff to continue negotiations to urge The AMA Council on Occupational Health to hold a meeting immediately after MSMS Annual Session in Detroit in 1976.

. . . APPROVED A CRITIQUE of HMO guidelines for the Department of Social Services and forwarded to the Department. The major points made by MSMS were: (1) Pluralistic system does not deny pre-paid health systems nor should HMOs contra-indicate private fee-for-service practice; (2) Health facilities should be available to both participating and non-participating physicians and patients; (3) Generalists, as well as specialists, should have privilege to subcontract service to HMOs; (4) HMO benefit package should exclude chronic long-term disorders traditionally the direct responsibility of the state; (5) Patient records must be held in confidence. MSMS also declared financial reserves must be adequate to meet high cost risks such as epidemics and natural disasters; overpromising can lead to disenchantment; consumers should play decision-making role in non-professional areas. MSMS welcomed the opportunity to critique the proposed document and offered continuing help.

. . . COMMENDED The MSMS Public Relations Committee approach to medical society public relations responsibilities and authorized the committee to proceed with its plans for five major trusts in 1973. The Committee presented the first draft of its plans (1) to help people get medical care (2) to continue the VD education efforts, (3) to conduct an educational program about medical aspects of pollution, (4) to carry on an educational program about chiropractic, and (5) to inform and motivate the medical assistants to help the physicians communicate more effectively.

Also at the Council meeting

PRESIDENT ADLER RECOMMENDED that staff prepare a critique and abstract of the report of "Michigan Health Cost Study" and send copies to Council members and component society presidents. The recommendation was approved. Another motion by Doctor Adler was approved to request Doctor Sweeny to obtain information for The Council about several aspects of the AMA budget.

PRESIDENT-ELECT COURY, MD, recommended that an orientation program be held for new MSMS members in November. This new idea was approved.

Robert E. Stelle, MD, Crystal Falls, was recommended as the MSMS representative to a seven-state Interstate Regional Planning for Nursing Needs.

Richard Gascoigne, MD, President of the Lenawee County Medical Society, attended as a guest of Councilor Sarapo.

The MSMS Ski Club is planning a trip to Aspen, Colo., March 10-17, 1973. The trip will include a charter flight from Detroit to Grand Junction, bus to Aspen, lodging at the Continental Inn, breakfast and lift tickets for $325 per person. First come . . . first served. Those interested, please contact Thomas Berglund, MD, at MSMS Headquarters, Box 950, East Lansing, 48823.

Michigan mediscene

Nov. 9-10—MSMS Conference on the Physician and Environmental Quality Control, Hilton Inn, Detroit Metropolitan Airport, contact: Helen Schulte, MSMS Headquarters

Nov. 9-10—Third annual Cardiology Symposium, "Cardiology for the Practitioner," Borgess Hospital, Kalamazoo, contact: Roberto Barcala, MD, 1521 Gull Road, Kalamazoo, 49001

Nov. 26-29—Many Michigan physicians will be traving to Cincinnati for the AMA Clinical Covention.

Dec. 6—The Council, MSMS headquarters, contact: Warren F. Tryloff, MSMS director

Dec. 6-12th—Annual Thyroid Workshop sponsored by Wayne State University School of Medicine, at Wayne County Medical Society, 1010 Antietam, Detroit, contact: Ali A. Abbasi, MD, Wayne State University School of Medicine, 540 E. Canfield, Detroit, 48201

Dec. 8-9—Twelfth Annual Symposium on Trauma, Wayne County Medical Society Headquarters, 1010 Antietam, Detroit, contact: Joseph L. Posch, MD, Suite 1408 Kales Building, 76 W. Adams, Detroit, Mich. 48226

Dec. 9—December Seminar, "Odontogenic Tumors," of the Michigan Society of Pathologists, Rackham Auditorium, The University of Michigan, Ann Arbor, contact: Jacob E. Briski, MD, Saint John Hospital, 22101 Moross Road, Detroit, 48236

Dec. 13-16—Seminar on emergency medicine, sponsored by Michigan chapter, American College of Emergency Physicians, Detroit General Hospital Emergency Department and Wayne State University Surgery Department, at Wayne County Medical Society headquarters, contact: Ronald L. Krome, MD, Director, Emergency Department, Detroit General Hospital, 1326 St. Antoine, Detroit, 48226

Jan. 20-21—Midwinter seminar of the American Association of Medical Assistants, State of Michigan Branch, Hayes Hotel, Jackson, contact: Margaret Broadwell, Michigan president, 406 Professional Plaza, 3800 Woodward Ave., Detroit, 48201

Jan. 30—Board meeting, Woman's Auxiliary to MSMS, MSMS headquarters, contact: Mrs. Fleming Barbour, 2015 Lincoln Drive, Flint, 48503

Feb. 6-10—American Group Psychotherapy Association, Hilton Hotel, Detroit, contact: Margaret Keefe, administrative secretary, 1865 Broadway, New York, 10023

Feb. 7-9—Western Michigan Nuclear Medicine Conference, Holiday Inn, Petoskey, sponsored by Hackley Hospital, Muskegon, and Central chapter of the Society of Nuclear Medicine, contact: James C. Carlson, MS, Hackley Hospital, 1700 Clinton St., Muskegon

Feb. 26-March 2—Clinical gastroenterology postgraduate course sponsored by the American College of Physicians, Towsley Center, University of Michigan Medical Center, Ann Arbor, contact: H. M. Pollard, MD, 2012 Vinewood Blvd., Ann Arbor, 48104

March 18—Board meeting, American Association of Medical Assistants, State of Michigan Branch, MSMS headquarters, contact: Margaret Broadwell, 406 Professional Plaza, 3800 Woodward Ave., Detroit, 48201

March 20—Annual Legislative Day, Woman's Auxiliary to MSMS, Olds Plaza Hotel, Lansing, contact: Mrs. R. J. Westerhoff, 2458 Maplewood, SE, Grand Rapids, 49506

March 21-22—Annual Michigan Conference on Maternal and Perinatal Health, Olds Plaza Hotel, Lansing, contact: Helen Schulte, MSMS headquarters

April 26-29—Annual State Convention, AAMA, Michigan branch, Dearborn Inn, Dearborn, contact: Margaret Broadwell, 406 Professional Plaza, 3800 Woodward Ave., Detroit, 48201

May 15-16—Spring conference, Woman's Auxiliary to MSMS, Hidden Valley Lodge, Gaylord, contact: Mrs. Fleming Barbour, 2015 Lincoln Drive, Flint, 48503

Welcome

Members of the Michigan State Medical Society join in welcoming the following new members into a progressive state medical organization. MSMS is dedicated to promoting the science and art of medicine, the protection of the public health, and the betterment of the medical profession. Each new member is encouraged to join with other MSMS members at both the local and the state levels in achieving these goals.

Parviz K. Amid, MD, 3321 Rochester Rd., Royal Oak 48073

Eugenius Ang, MD, Chelsea Medical Clinic, Chelsea 48118

Barry V. Bast, MD, 963 Orchard, S.E., Grand Rapids 49506

Lawrence B. Edelman, MD, 134 W. University Dr., Rochester 48063

Armando J. Espiritu, MD, 26711 Woodward Ave., Huntington Woods 48070

Edgardo T. Espiritu, MD, 1000 W. University Dr., Rochester 48063

Lois Ann Harrison, MD, 2424 Spring Arbor Rd., Rochester 49203

Lothar Krueger, MD, Northport 49670

James I. Mudgett, MD, 215 S. Madison, Traverse City 49684

Benjamin F. Pettit, MD, Burns Clinic Medical Ctr., PC, Petoskey 49770

Sri R. Ram, MD, 3535 W. 13 Mile Rd., Royal Oak 48072

Rashmi Shah, MD, Lapeer State Home, Lapeer 48446

Stanley R. Smith, MD, Burns Clinic Med. Ctr., PC, Petoskey 49770

Jerome P. Waiter, MD, 3535 W. 13 Mile Rd., Royal Oak 48072

Pluto K. Wong, MD, 3221 Coolidge, Royal Oak 48072

At the suggestion of MSMS, several county medical societies are paying recognition to area physicians who serve as team doctors for high school and college athletics. For instance, the Ottawa County Medical Society built a special program around its recent honors to local team physicians. The Ottawa County Sports Night featured a National Football League official from Muskegon and films describing how game injuries occur and can be prevented. Athletic directors of local high schools and colleges spoke in tribute of their team doctors, who included William Rottschaefer, MD, Holland; John J. Post, MD, Allendale; Eugene Timmerman, MD, Coopersville; Ralph Hager, MD, Hudsonville; Otto Vander Velde, MD, Holland; John H. Kitchel, MD, Grand Haven, and D. J. Bloemendal, MD, Zeeland.

Three Kalamazoo physicians were unable to be present at the special ceremonies honoring them Sept. 19 at the Kalamazoo Academy of Medicine meeting. But Academy President Donald May, MD, right, presented citations to, from left, William Kavanaugh, MD; Richard Lemmer, MD, Francis Cretsinger, MD, and Paul Koestner, MD, all of Kalamazoo. Those absent, because they were on duty at games, were Lloyd Appell, MD, and Rodney Rogers, MD, both of Vicksburg, and Jack Hunt, MD, of Kalamazoo.

MSMS committee focuses its energies on environment

The former MSMS Committee on Public Health is carrying out its responsibilities with renewed vigor since the change of its name last February to the Committee on Public *and Environmental* Health.

Under the leadership of new chairman Louis R. Zako, MD, Westland, the committee has put emphasis on the environmental part of its name.

The committee has sent a letter to all hospital administrators and purchasing agents, Governor William G. Milliken and selected committees of the Michigan Legislature expressing physicians' concern with the pollution potential of the rapidly increasing use of disposable items in hospital and office practices.

"The net polluting effect of these disposables may be worse than the effect of the items substituted," observed the committee. "The trend has become so alarmingly inclusive that it appears disposables are being provided too broadly without due consideration as to whether the substitution is medically justifiable or essential. The substitute item may be somewhat inadequate but soon the old is no longer available for medical use."

Secondly the committee is directing the MSMS sponsorship of the International Conference on the Physician and Environmental Quality Control, which will draw medical and legislative representatives from Canada and the Great Lakes states to the Hilton Inn, Detroit Metropolitan Airport, Nov. 9-10.

Thirdly, the committee has invited a representative of the Radiation Section of the Michigan Department of Public Health to speak at its meeting this fall about the health hazards of radioactive products of Michigan's nuclear power plants.

A fourth activity of the committee has been to write to Maurice H. Reizen, MD, MDPH director, expressing physicians' concern that "perhaps today's (patient) isolation standards (in hospitals and institutions) are inappropriate in the light of present scientific knowledge. The committee highly recommends that you continue the work of the (MDPH) study group (looking into current isolation control practices) and that a set of guidelines be completed."

A fifth activity of the committee has been to write to the Michigan Department of Agriculture to urge that a technique be developed to identify a dangerous food product. "The dating of perishable foods alone does not assure safety for the consumer," states the letter. The committee's new thrust has led also to a reevaluation of its purposes. As redefined by the committee last spring, they are "to be concerned with the high level of health and well-being of people."

The purpose will be implemented, stated the committee, by promoting preventive health measures, taking leadership roles in environmental quality control, influencing legislation, promoting closer cooperation between physicians and health department, and coordinating and promoting efforts in environmental health between MSMS and other concerned health organizations.

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> *"The history of science, and in particular the history of medicine . . . is . . . the history of man's reactions to the truth, the history of the gradual revelation of truth, the history of the gradual liberation of our minds from darkness and prejudice."*
>
> *—George Sarton, from "The History of Medicine Versus the History of Art"*

Are combination drug products useful in treatment involving concomitant use of two or more drugs?

Opinion

Results of a questionnaire to 7,000 physicians:

62.9%
Believe combination drug products are useful.

13.8%
Do not believe combination drug products are useful.

Are combination drug products useful in treatment involving concomitant use of two or more drugs

Opinion & Dialogue

Doctor of Medicine

Louis Lasagna, M.D.
Professor and Chairman
Department of
Pharmacology & Toxicology
University of Rochester
School of Medicine
and Dentistry

Obviously, many drugs are given concomitantly. Whether it makes sense to combine medications in one preparation, be it capsule, tablet, or liquid, is a question that can be answered only by examining the advantages and disadvantages in the individual case.

Among the advantages is, first of all, convenience. The more medications that are taken concurrently and the more complicated the directions, the less likely the patient is to take medications accurately. From the standpoint of convenience and accuracy, and economy as well, you can make an important case for putting medications together in one preparation, as long as they are compatible.

By the same token, when you prescribe a properly tested and rational combination, you should have less worry about pharmaceutical or pharmacological compatibility – and about reasonable dosage ratios as well. Compatibility of the formulation should be demonstrated in the laboratory and clinic before the product is available for prescription—which is more than can usually be said for the physician's own spontaneous creations. And, the dosage ratios employed in rational precompounded combinations are designed to meet the needs of substantial numbers of "typical" patients.

There is no doubt that many "atypical" patients are to be found, and for them the prefabricated combination must be rejected. But that hardly argues for eliminating rational combinations from the market. Think, for example, of the problems that would arise if the components of widely accepted combinations, like the oral contraceptives and the diuretic-antihypertensives, always had to be prescribed, purchased and ingested separately.

One disadvantage that comes to mind is some doctors' unawareness of the ingredients a given combination contains. For example, a doctor might know that a patient is allergic to aspirin but forget that a certain analgesic mixture, which he knows only by its trade name, contains aspirin. His prescription, then, causes considerable discomfort, to say the least. This problem is a function of physician education, rather than of combination therapy as such. Improving doctors' knowledge about all medicaments they prescribe is a problem that deserves tackling on its own.

Another accusation leveled at combination drugs is that they encourage sloppiness of diagnosis and treatment. In many cases, however, a combination may prove to be the most effective choice. A good example of the usefulness of combinations appears in a recent article in the *Journal of Chronic Diseases* on the efficacy and side effects of an antihypertensive containing three ingredients, in which the track records of the combination drug and the individual ingredients were compared. Interestingly enough, whether the drugs were given individually or together, incidence and severity of side effects were the same. But blood pressure control was invariably better when the drugs were taken in one combination tablet than when they were taken separately (in "titratable" dosage) or in two or three different tablets.

Deciding which combinations constitute rational therapy obviously leads to a discussion of who is to determine which should be used and which should not. Realistically, I think combinations should be evaluated somewhat differently if they are old and established or new and untried.

In today's regulatory atmosphere, there is no possibility of a new combination being put on the market without a substantial amount of acceptable evidence in the form of controlled trials that show it to be safe and efficacious. On the other hand, I believe a different set of standards should apply to combination preparations that have been around for a long time. In other words, physician acceptance over a long period should be given some weight as evidence of the efficacy and safety of these drugs.

The FDA, however, does not seem to share this attitude. It often requires, for these older products, controlled trials that will monopolize the time of already overtired investigators and cost a greal de
of money. I wish we cou
agree on a "grandfath
clause" approach to prep
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that have an apparent
satisfactory track record.

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use) of the combination.

The point that should
emphasized is that the
are both rational and ir
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Obviously, the FDA mu
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assessing the evidence a
in making the ultimate
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Maker of Medicine

W. Clarke Wescoe, M.D.
President
Winthrop Laboratories

If two medications are
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The other semantic ploy
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nal.

Take antibiotic mixtures,
e source of much of the
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combinations generally. Obviously, no one should be exposed willy-nilly to the potential side effects of two or three antibiotics when only one is needed. At the same time there are cases where it is prudent to prescribe more than one. The clinician is the judge in these circumstances, as he should be.

There is no clear definition of the word rational. Most persons, I suppose, would find it synonymous with reasonable, but in many circumstances it may best be defined as the opinion of those in power at the moment.

Other factors govern combination therapy, not the least of which has been its broad use by practicing physicians anxious to achieve convenience in prescribing, to reduce medication error, and to save money for their patients. Combinations clearly have met the test on all three counts.

I have been impressed by studies showing that the rate of error climbs markedly with the number of medications to be taken, even with sophisticated patients. When medically justified, therefore, this factor alone supports the logic of combination therapy.

The cost argument for combinations appears to be irrefutable. In 1971, R. A. Gosselin studied the 71 combination products (excluding oral contraceptives) among the 200 most prescribed drugs. The study found that if all 71 products were discontinued, and if each ingredient in these combinations were prescribed separately, the price of medicines to patients would jump by $443.2 million on a national basis! At a time when the cost of medical care is under so much fire, it would be nonsensical to boost costs without clearly irrefutable medical reasons.

The part played by government on this question, of course, is fundamental. The FDA should play a role in determining which combinations are reasonable. That role, as defined by law and regulation, is to ensure that any medication on the market is safe and effective in line with its label claims. Certainly combinations are entitled to as much consideration as single entities—neither more nor less. So long as the addition of one drug to another does not make either less safe, or less effective, so long as they are compatible in a formulation, we have a reasonable product. It makes no sense to recommend the use of two products for certain conditions and to deny their being combined in a single form. An unhappy side effect of the problem concerns the efficacy panel discussions of many products submitted for review. The term "effective, but" has been freely interpreted to mean "ineffective" in toto, regardless of the merit of the individual drugs. This interpretation has placed numerous useful combination products in needless jeopardy.

In reading the actual reports of the review panels, it seems clear that some of the ratings were based less on scientific research and clinical observation than on the "informed" opinions of the panelists. These "informed" opinions were accepted at face value, while the "informed" opinions of others who had used the products were rejected. All of this put combination products into a sort of scientific never-never land.

It should be kept in mind by all, government as well as others involved in our health care system, that advances in therapy are seldom made in leaps and bounds but rather by small painstaking steps—and that some of these steps have resulted from research in combination drugs as well as with single entities. Given the near-infinite biologic variation in patient response, this is hardly surprising to clinicians. It should not be to regulatory agencies either.

In the end, the practicing physician is in the best position to decide if a particular combination makes sense. Such a decision should not be made exclusively by those whose responsibility for continuing clinical care is limited. Clinicians are the best judges of efficacy because the ultimate proof of any product's effectiveness is acceptance by physicians who have observed its actions in patients over time. The corollary statement may be made about over-the-counter medicines, which would not long survive if they failed to afford the relief the user anticipates. That the antihistamine in a "cold" remedy may not *always* be necessary is no reason to proscribe the combination generally.

Opinion & Dialogue

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Scientific papers

Motor neuropathy associated with herpes zoster

By Mark C. Levine, MD, FACP
Flint

Abstract

Muscle paralysis due to herpes zoster is a well-recognized but relatively uncommon complication of this viral infection of the posterior root ganglion.

Six patients, ranging in age from 64-80 years, developed muscle weakness four to 20 days after the appearance of the herpetiform rash. None suffered from underlying auto-immune or malignant disease. The paralysis involved muscles of the extremities and trunk corresponding to the distribution of peripheral nerves originating from the nerve roots involved by the herpes zoster infection. Electromyography and nerve conduction studies were consistent with peripheral neuropathy rather than a lesion of the motor root or anterior horn cell.

Five patients recovered completely within four months; one patient remained with minimal weakness of the right hand. Only symptomatic and physical therapy was required.

Awareness that muscle weakness can complicate herpes zoster, and of the generally good prognosis, may prevent unnecessary hospitalization, diagnostic study, and overtreatment.

Herpes zoster is a virus infection characterized by a painful vesicular eruption occurring in the cutaneous distribution of spinal segmental sensory nerve roots. The varicella-zoster virus is thought to remain latent, possibly in an incomplete or provirus phase, in the dorsal root ganglia after hematogenous dissemination during the initial chickenpox infection.[24] In later life, the virus may be re-activated, and then migrate antidromically along peripheral nerves into the skin innervated by the repository ganglia. In the course of the recrudescent infection, involvement of the motor nerves supplied by the affected spinal segments occasionally occurs. This is a report of six cases of this infrequently recognized complication.

All of the patients were seen as referrals for neurological consultation, between 1962 and 1968.

Case Reports

Case 1. E.H., a 77-year-old housewife, had been in relatively good health when in August, 1962, she noted pain over the anterior and medial aspect of the right thigh, followed in five days by a herpetic eruption over this area. About four days after the appearance of the vesicles, she found that she was unable to extend her right knee or flex her hip.

Pain and weakness persisted, and when she was examined six weeks after onset of symptoms, there was atrophy and paralysis of the right quadriceps femoris muscle, and sensory loss over the L/1 to L/3 dermatomes. The right knee jerk was absent. Apart from moderate hypertension (200/115), with some cardiomegaly, and mild decrease of position and vibratory sense distally in both lower extremities, examination was unremarkable. A fasting blood sugar was 131 mg%.

No further diagnostic studies were performed. The patient received analgesics, and active physical therapy was prescribed. Her physician reported that she had made a full recovery within 3-4 months.

Case 2. R.C., aged 65, a retired engineer, was brought to the hospital emergency room in May 1963, complaining of severe left precordial chest pain, radiating into the left side of the neck and left upper extremity. He had had symptoms of coronary insufficiency in the past. On admission to the hospital, pulse was 108/min., blood pressure 170/100, but general physical examination was

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This paper was presented in part at the regional meeting of the Michigan Chapter of the American College of Physicians at Mackinac Island, Sept. 19-21, 1969.

Doctor Levine is a Flint physician specializing in medical and diagnostic neurology.

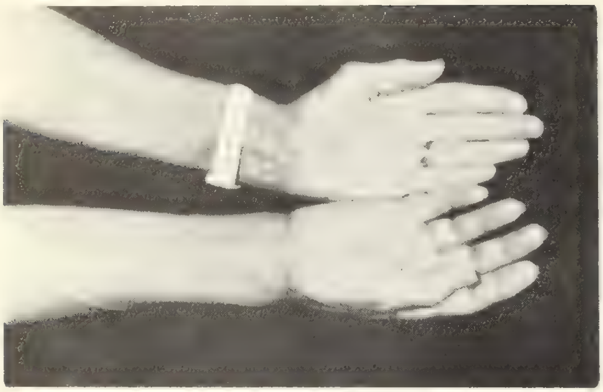

Figure 1

within normal limits. There was no skin rash or neurological deficit. All laboratory studies were normal.

The patient continued to complain of chest and left shoulder pain, but EKG's remained normal. On the sixth hospital day, however, a papulovesicular eruption over the lateral aspect of the left arm and forearm (C/5 and C/6 segmental dermatomes) appeared, and the diagnosis of herpes zoster was made. Four days after the appearance of the rash, the patient noted that he could not abduct his left arm, and muscle testing revealed weakness of the left deltoid, biceps, triceps and pectoralis major muscles, as well as of the extensors of the left wrist. Tendon reflexes were absent in this extremity. The other limbs were normal.

Neither LP nor EMG was performed. The patient was treated symptomatically, and instructed in appropriate exercises. Within three months, all symptoms had cleared and strength in the left arm was normal.

Case 3. In May 1966, M.O., a 74-year-old housewife, developed burning pain around the right shoulder, and four days later vesicles appeared in this area and soon extended to involve the right arm, forearm, and radial aspect of the hand. Pain subsided, but about one week later, weakness of the right wrist and hand, and then of flexion of the forearm, was noted. Apart from well-controlled hypertension, the past medical history was unrevealing.

The patient was moderately obese, with evidence of osteoarthritis of her fingers and knees; blood pressure was 180/90. There was a resolving herpes zoster rash over the C/5, C/6, and C/7 distribution on the right, with hypesthesia distally and hyperalgesia proximally. Mild paresis of the right deltoid, biceps, brachioradialis and flexor muscles of the wrist and fingers, and moderately severe weakness of the triceps, and wrist and digital extensors, were present. The right upper extremity was areflexic. Elsewhere, no neurological abnormalities were recorded.

A complete blood count, fasting blood sugar, blood urea nitrogen and serum cholesterol were normal, as was the chest X-ray. Electromyography revealed denervation consistent with a lesion involving the upper and middle trunks of the brachial plexus.

The patient did not return for follow-up examination, but her physician informed me that full sensory and motor recovery had occurred within six months.

Case 4. M.B., a 67-year-old housewife, had been in excellent health until late May of 1968, when she developed a painful vesicular eruption over the distal right upper extremity and the medial aspect of the right arm. A few days later, she noted weakness of the right hand, which progressed to severe paresis of the distal upper extremity. When examined several weeks after the onset of symptoms, residua of the herpetic lesions on the medial aspect of the right forearm and hand, including the fourth and fifth fingers, were still evident. There was anhidrosis, erythema, and hyperesthesia of the limb distal to the mid-forearm, with patchy superficial sensory loss corresponding roughly to the C/6, C/7, C/8 and D/1 spinal segments. Mild to moderate weakness of the wrist extensors, and marked wasting and weakness of the intrinsic hand muscles, were present. (**Fig. 1**) Triceps and wrist jerks were reduced on the right. The remainder of the neurological examination was unremarkable, as was the general physical exam.

Radiologic and routine blood studies were normal. The CFS contained no cells; protein was 45 mg%. EMG and nerve conduction studies were consistent with a severe median and ulnar neuropathy.

Treatment consisted of analgesia, tranquilizers, and physical therapy, including electrical muscle stimulation. She was re-examined in October of 1968, at which time there was some residual motor and sensory deficit in the distribution of the right ulnar nerve, but pain had resolved and the extremity was functional. Recovery was virtually complete three months later (approximately eight months after the onset of symptoms).

Case 5. A 64-year-old businessman, M.D., was examined in October of 1968, because of bulging on the left flank. Three weeks previously, a rash over the lower lateral chest on the left side had been diagnosed as herpes zoster, and only mild analgesia was required for treatment. He denied other symptoms, and his past health had been excellent.

Examination revealed a fading rash over the left D/9 and D/10 dermatomes, and a prominent bulge in the left upper quadrant and flank (**Fig. 2**), due to weakness of the left rectus abdominus and oblique muscles. The bulge was much more ap-

Figure 2

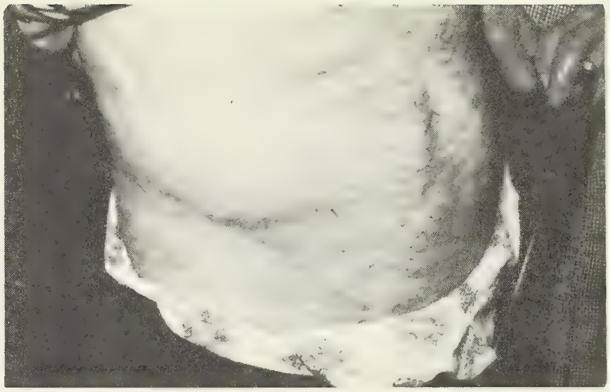

Figure 3

parent when the muscles were tensed against resistance. No other positive findings were recorded. Electromyography confirmed denervation in the external abdominal oblique muscle.

Full recovery ensued within two months.

Case 6. L.C., a retired automotive assembly employee of 80, developed herpes zoster over the right lower abdomen in September of 1968. About two weeks later, as the rash was fading, he noted bulging of the lateral and anterior abdominal wall just above the area of the rash. Burning pain was still present at the time the patient was examined, six weeks after the abdominal bulge had appeared.

The past history included arteriosclerotic heart disease with myocardial infarction, diabetes mellitus, and a left internal carotid thrombosis with residual mild spastic right hemiparesis and amaurosis O.S.

Examination revealed a regular pulse at 80/min., blood pressure of 180/100, mild cardiomegaly, optic atrophy O.S., and a spastic mild right hemiparesis with slight aphasia. Just above the level of the umbilicus, the right abdominal wall bulged laterally, most prominently when the patient leaned forward (**Fig. 3**). The pigmentary changes from the herpes zoster could be seen below this area (D/10 and D/11 segmental dermatomes).

Electromyography revealed fibrillations and positive waves in all areas of the right abdominal musculature, most impressively in the right lower rectus abdominus. At the time the EMG was performed, three months after onset of symptoms, there was electrical evidence that reinnervation was occurring.

The patient's personal physician reported that full recovery had occurred approximately four months after the appearance of the abdominal wall weakness.

Summary of Clinical Findings

There were three men and three women, ranging in the age from 64-80 years. None suffered from malignancy or auto-immune disease. Four patients recalled varicella during childhood. There was no seasonal predilection, nor any relationship to the incidence of varicella in the community.

Muscle weakness was noted four to 20 days after the appearance of the rash, which was usually preceded by several days of local burning pain. In the four cases in which the extremities were involved, the paresis was initially masked by the pain of the herpetic eruption. The two patients with involvement of the abdominal musculature noted a painless bulging of the abdominal wall in the area of the rash. The severity and duration of the sensory symptoms seemed to be unrelated to the development of muscle paralysis.

The sensory and motor segmental levels did not always correspond, which is not surprising in view of the electromyographic picture of a periphreal nerve or plexus lesion, rather than denervation primarily due to involvement of the spinal motor root or anterior horn cells. This also reflects the pathology of acute herpes zoster, as described by Head and Campbell[23] and Denny-Brown, et al.[12]

In most patients, sensory loss extended beyond the area of segmental dermatomal rash, again consistent with the electromyographic diagnosis of peripheral neuropathy. In only one patient was recovery delayed beyond six months; this lady (M.B., Case 4) had extensive sensory and motor neuritis involving the entire right upper extremity. In all cases, sensory symptoms and deficit resolved before motor function had returned completely.

Analgesia and physical therapy constituted the only treatment in all cases, except for patient M.B. (Case 4) in whom the extensive denervation warranted the use of electrical muscle stimulation.

Table I

Case	Age	Sex	Associated Disease	Onset of Rash After Pain (days)	Onset of Paralysis After Rash (days)	Duration of Paralysis (months)	Recovery
1	77	F	Diabetes Hypertension	5	4	3	Complete
2	65	M	ASHD	4	4	3	Complete
3	74	F	Hypertension	4	10	5	Complete
4	67	F	None	3	6	8	Very mild residual weakness of right hand
5	64	M	None	3	20	2	Complete
6	80	M	Diabetes ASHD, CVA	4	14	4	Complete

The clinical features are summarized in **Tables I and II.**

Discussion

Motor neuropathy associated with herpes zoster was first described by Broadbent[4] in 1866, and subsequent reports have included isolated and multiple cranial nerve palsies (ocular, pharyngeal, laryngeal and facial muscles),[12,13,14,15,17,25,26,37] diaphragmatic paralysis,[5,22] as well as paralysis of the muscles of the trunk,[38,40,42,44] extremities,[4,8,19,20,27,36,37,41,43] and even the urinary bladder.[11,34] To date, the literature contains reports of approximately 60 cases of extremity paralysis (about two-thirds of which have involved the upper limbs), six cases involving the abdominal or intercostal muscles, and 25 cases in which atony of the bladder was attributed to herpes zoster involving sacral nerves. Cases have ranged in age from two to 89 years.[36,39]No sex difference has been noted.

(Cranial nerve palsies will not be discussed. The incidence of facial nerve paralysis or ocular muscle weakness with herpes zoster is difficult to assess; lower cranial nerve palsies must be very rare.)

The incidence of motor neuropathy due to herpes zoster is probably much higher than the number of reported cases implies. In Grant and Rowe's series of 101 cases of shingles from the Massachusetts General Hospital,[19] 25 involved the extremities, and of these five patients (21%) developed muscle weakness. Two or more sensory segments were affected in cases complicated by motor neuropathy.

On the other hand, Rubin and Fusfeld reported only one case of motor neuropathy in 91 cases of herpes zoster of the trunk,[39] and one in 51 cases when extremities were involved. In the large series of Burgoon et al.,[7] Head and Campbell,[23] Hope-Simpson,[24] and Molin,[35] the thoracic segments were affected in about 55% of patients, the extremities in approximately 25%, cranial nerves about 20% of the time, and lower sacral segments in 1% of cases. Bearing in mind the difficulty of clinical diagnosis of an isolated unilateral segmental paresis of intercostal or abdominal musculature, and the reluctance to perform electromyopraphy of the chest wall because of the rick of pneumothorax, a presumptive incidence of 10-20% for motor neuropathy is not unreasonable.

Table II

	SENSORY INVOLVEMENT		MOTOR INVOLVEMENT		
Case	Site of Eruption	Segmental Dermatomes	Muscles Affected	Segmental Myotomes	ELECTRODIAGNOSTIC FINDINGS
1	Anterior and Medial Thigh (R)	L/1, 2, 3	Quadriceps Femoris	L/2, 3, 4	Not done
2	Lateral Arm and Forearm (L)	C/5, 6	Deltoid, Biceps, Triceps, Wrist	C/5, 6, 7	Not done
3	Lateral Arm, Forearm and Hand (R)	C/5, 6, 7	Brachioradialis, Wrist Extensors, Thenar Muscules	C/6, 7, 8	Lesion of upper and middle trunks of brachial plexus (radial and median nerves)
4	Forearm, Hand, and Medial Arm (R)	C/6, 7, 8 D/1, 2	Triceps, Wrist Extensors All Muscles of Hand	C/6, 7, 8 D/1, 2	Denervation in distribution of median and ulnar nerves, low nerve conduction velocities
5	Upper Abdomen (L)	D/9, 10	Abdominal obliques	D/9, 10	Incomplete lower motor neurone lesion
6	Lower Abdomen (R)	D/10, 11	Abdominal oblique and rectus muscles	D/9, 10, 11	Denervation lower abdominal oblique and rectus muscles

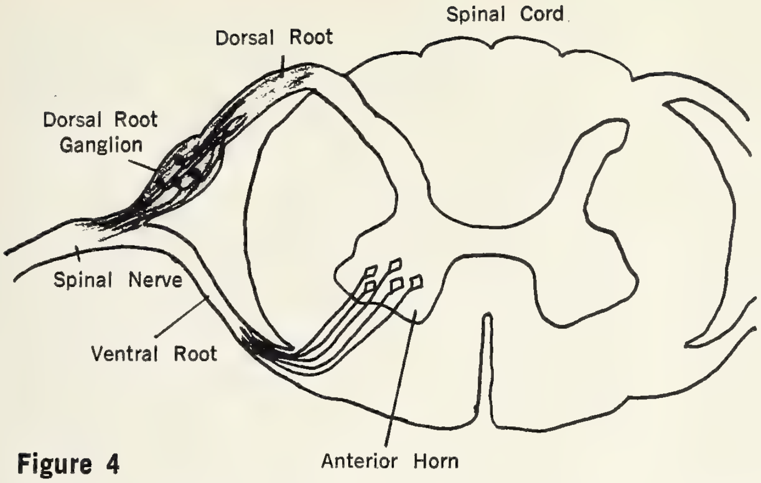

Figure 4

Diagram of spinal cord and nerve roots to indicate location of inflammatory reaction in herpes zoster. The intensity of the inflammation is indicated by the degree of shading.

The pathology of herpes zoster[1,12,23,31] also suggests that motor nerve involvement could be relatively common (**Fig. 4**). While the primary lesion is a dorsal root ganglionitis, inflammatory and degenerative changes regularly extend rostrally into the dorsal roots and spinal cord, and distally to involve the spinal and peripheral nerves. The ventral (motor) roots are less frequently and extensively involved, but inflammation of the motor fibers can arise from contiguous spread of the inflammatory reaction when the motor roots overlie the sensory ganglia (as apparently occurs when lower cranial nerves are affected).[14] These changes may be found even when the disease remains a sensory neuritis clinically.

Further, Carter[9] found aCSF pleocytosis and protein elevation in 14 of 44 consecutive cases of uncomplicated herpes zoster when lumbar puncture was performed within one week of onset of the rash. Gold[16] reported similar findings in eight of 21 patients, and Greenfield[21] states that the CSF consistently shows a moderate pleocytosis. Varicella-zoster virus has been recovered from the spinal cord of a patient in whom extensive myelopathy at the level of the eruption was not associated with obvious lower extremity weakness.[32] It would seem reasonable to postulate that central or peripheral nervous system complications (encephalitis,[32] myelitis,[27] motor neuropathy) occurring during the acute stage of herpes zoster, are due to direct effects of the viral invasion of neural structures. On the other hand, the clinical course and CSF findings in cases of hemiplegia[3,30] paraplegia,[15,18] or polyneuropathy,[29] appearing several weeks after acute phase, suggests a post-infectious auto-immune reaction as might follow any viral infection.[28] Paralysis of the extremities has not been reported in patients with disseminated herpes zoster,[33] but since the majority of this group was associated with other serious illness (often with an altered immune response), detailed neurological examination of the extremities may not have been possible.

Norris and associates[37] have reported two cases of recurrent herpes zoster, with localized muscle weakness and tenderness, in whom biopsies of the affected muscles revealed cytoplasmic virus-like particles in altered muscle fibers. Whether this represented symptomatic virus myositis is unclear, nor is it known how often this might occur.[10] It has also been suggested that Bell's palsy and neuralgic amyotrophy might represent a motor neuropathy in patients with herpes zoster in whom the skin eruption did not appear or was so mild and transient as to have been missed by the patient and/or physician.[27] However, Aiken and Brain[2] concluded that the majority of cases of Bell's palsy without a herpetiform rash were not due to infection by varicella-zoster virus, and Parsonage and Turner in their classical paper[38] did not record a single case of herpes zoster amongst their 136 patients with neuralgic amyotrophy, nor do they even mention herpes zoster sine herpete as a possible cause.

Several authors have drawn attention to the pathological descriptions of the inflammation of the dorsal grey matter in herpes zoster ("posterior poliomyelitis"), which often extends into the anterior horn to some degree. They have assumed that the motor neuropathy is due to damage to anterior horn cells. However, the electromyographic and nerve conduction findings in the present series, tend to exclude a myelitis or radiculitis, and to place the lesion responsible for muscle weakness distal to the nerve roots, i.e., a neuritis and/or plexitis. (The myelitis and neuritis are undoubtedly responsible for the syndrome of post-herpetic neuralgia, since these lesions do not resolve completely for weeks or months after the vesicular eruption has cleared.[23,31])

Treatment

There is no specific therapy for herpes zoster, either during the acute stage or in the course of complications. Steroids are contraindicated, and when herpes zoster has occurred in patients receiving long-term cortoicosteroid therapy, the infection has been more severe and often becomes disseminated.[13,33] While zoster immune globulin has prevented varicella in children,[6] its routine use in shingles would be impractical, and whether its could modify the course of the illness (especially when the eruption is extensive) is unknown.

The treatment of the motor neuropathy is essentially supportive. Physical therapy and electrical muscle stimulation are useful in selected cases. While in this series complete or near-complete recovery occurred within six months, significant residual paresis has been reported in up to 25% of cases.[20,41]

Summary and Conclusions

1. Six cases of muscle weakness due to herpes zoster have been described, and the pertinent literature reviewed with particular emphasis on the pathology of herpes zoster.
2. Although herpes zoster most commonly presents as a sensory neuritis, the pathological findings in this disease suggest that muscle weakness and/or other neurological complications should be relatively common.
3. The incidence of motor neuropathy is uncertain, but may occur in over 15% of cases, at least when the extremities and/or multiple segments are involved. The muscle weakness usually appears within one week of the onset of the rash, but may be delayed up to three weeks.
4. Electromyography and nerve conduction studies indicate that the motor neuropathy is due to a lesion in the spinal nerve, rather than to inflammatory changes in the motor roots or anterior horn cells.

   Electrodiagnostic studies are also of value in determining the presence and extent of the motor neuropathy, and wider application of these techniques might uncover cases with milder and subclinical involvement, and establish their true incidence.
5. Complete recovery within two to six months is the rule, physical therapy and electrical muscle stimulation permitting maximal functional return.
6. The severity and duration of sensory symptoms is unrelated to the development of muscle paralysis.
7. Awareness that weakness of the muscles of the extremities or abdominal wall can complicate herpes zoster, and of the uniformly good prognosis, can avoid unnecessary hospitalization, diagnostic study and overtreatment.

Acknowledgement

I would like to express my appreciation to Jack R. Grommons, MD, for performing electrdiagnostic studies on cases three and six, and to Seymour L. Osher, MD, for referring cases five and six because he was aware of my interest in this problem.

Addendum

After submitting this article for publication, a comprehensive clinical study from the Mayo Clinic was published. (Segmental Zoster Paresis—A Disease Profile, by Drs. J. E. Thomas and F. M. Howard, Jr., in Neurology *22:459, 1972.) This study recounted experience at the Mayo Clinic over a period of 10 years. Sixty-one cases were reported, including 28 with cranial nerve palsies only, of which 23 involved the seventh cranial nerve. Sixteen patients had paresis with herpes zoster involving the upper extremities, 15 in the lower extremities, and two of the abdominal musculature. The findings and conclusions were essentially similar to other clinical reports on this entity, and the prognosis in this rather large series was quite good.*

References

1. Adams, R.D.: The Pathological Features of Herpes Zoster. *Bull. New England M. Cent.* 6:12, 1944.
2. Aiken, R.S. and Brain, R.T.: Facial Palsy and Infection with Zoster Virus. *Lancet* 1:19 (Jan. 7), 1933.
3. Anastasopoulos, G., Routsonis, K. and Ierodiakonou, C.S.: Ophthelmic Herpes Zoster with Contralateral Hemiplegia. *J. Neurol. Neurosurg. Psychiat.* 21:210, 1958.
4. Broadbent, W.H.: A case of Herpetic Eruption in the Course of Branches of the Brachial Plexus, Followed by Partial Paralysis in Corresponding Motor Nerves. *Brit. Med. J.* 2:240, 1886.
5. Brostoff, J.: Diaphragmatic Paralysis after Herpes Zoster. *Brit. Med. J.* 2:1571, 1966.
6. Brunell, P.A., Ross, A., Miller, L.H. and Kuo, B.: Prevention of Varicella by Zoster Immune Globulin. *New England J. Med.* 280:1191, 1969.
7. Burgoon, C.F., Jr., Burgoon, J.S., and Baldridge, G.D.: The Natural History of Herpes Zoster. *J. Amer. Med. Assoc.* 164:265, 1957.
8. Carter, A.B. and Dunlop, J.B.W.: Paresis Following Herpes Zoster: A report of Two Cases. *Brit. Med. J.* 1:234, 1941.

9. Carter, A.B.: Investigation into the Effects of Aureomycin and Chloramphenicol in Herpes Zoster. *Brit. Med. J.* 1:987, 1951.
10. Caulfield, J.B., Rebeiz, J. and Adams, R.D.: Viral Involvement of Human Muscle. *J. Path Bact.* 96: 232, 1968.
11. Constantin, J.M.: Herpes Zoster Causing Bladder Atony. *J. Urol* (Baltimore) 102:689, 1969.
12. Denny-Brown, D., Adams, R.D. and Fitzgerald, P.J.: Pathologic Features of Herpes Zoster: A note on "Geniculate Herpes." *Arch. Neurol. Psychiat.* 51:216, 1944.
13. Eckhardt, W.F., Jr. and Hebard, G.W.: Severe Herpes Zoster During Corticosteroid Therapy. *Arch. Int. Med.* 108:594, 1961.
14. Engstrom, H. and Wohlfart, G.: Herpes Zoster of the Seventh, Eighth, Ninth and Tenth Cranial Nerves. *Arch. Neurol. Psychiat.* 62:638, 1949.
15. Force, L., Jouffe, G., Perrouty, M. and Perrouty, P.: Deus Paralysies Zosteriennes: Zona Thoracique Suivi De Myelite Et Paralysie Velolaryngee Au Cours. D'un Zona Genicule. *Marseille-Med.* 105: 381, 1968.
16. Gold, E.: Serologic and Virus-Isolation Studies of Patients with Varicella or Herpes Zoster Infection. *New Eng. J. Med.* 274:181, 1966.
17. Goldsmith, M.D.: Herpes Zoster Ophthalmicus with Sixth Nerve Palsy. *Canad. J. Ophthal.* 3:279, 1968.
18. Gordon, I.R.S. and Tucker, J.F.: Lesions of the Central Nervous System in Herpes Zoster. *J. Neurol. Neurosurg. Psychiat.* 8:40, 1945.
19. Grant, B.D. and Rowe, C.R.: Motor Paralysis of the Extremities in Herpes Zoster. *J. Bone and Joint Surg.* 43-A:885, 1961.
20. Greenberg, J.: Herpes Zoster with Motor Involvement. *J. Amer. Med. Assoc.* 212:322 (Letters), 1970.
21. Greenfield's *Textbook of Neuropathology,* Second Edition (1963), pp. 196-7 The Williams and Wilkins Company, Baltimore.
22. Halpern, S.L. and Covner, A.H.: Motor Manifestations of Herpes Zoster—Report of a Case of Associated Permanent Paralysis of the Phrenic Nerve. *Arch. Int. Med.* 84:907, 1949.
23. Head, H. and Campbell, A.W.: The Pathology of Herpes Zoster and Its Bearing on Sensory Localization. *Brain* 23:353, 1900.
24. Hope-Simpson, R.E.: The Nature of Herpes Zoster: A Long-Term Study and a New Hypothesis. *Proc. Roy. Soc. Med.* 58:9, 1965.
25. Hunt, J.R.: On Herpetic Inflammation of the Geniculate Ganglion. *J. Nerv. Ment. Dis.* 34:73, 1910.
26. Hunt, J.R.: The Symptom-Complex of the Acute Posterior Poliomyelitis of the Geniculate, Auditory, Glossopharyngeal and Pneumogastric Ganglia. *Arch. Int. Med.* 5:631, 1910.
27. Kendall, D.: Motor Complications of Herpes Zoster. *Brit. Med. J.* 2:616, 1957.
28. Kennedy, C. and Wanglee, P.: Encephalitis: A Variable Syndrome in Response to Viral Infection. *Ped. Clin. N. Amer.* 14:809, 1967.
29. Knox, J.D.E., Levy, R. and Simpson, J.A.: Herpes Zoster and the Landry-Guillain-Barre Syndrome. *J. Neurol. Neurosurg. Psychiat.* 24:167, 1961.
30. Laws, H. W.: Herpes Zoster Ophthalmicus Complicated by Contralateral Hemiplegia. *Arch. Ophthal.* 63:273, 1960.
31. Lhermitte, J. et Nicholas: Les Lesions Spinales DuZona. La Myelite Zosterienne. *Rev. Neurol.* 40 (1) :361, 1924.
32. McCormick, W.F., Rodnitzky, R.L., Schochet, S.S., Jr. and McKee, A.P.: Varicella-Zoster Encephalitis: A Morphologic and Virologic Study. *Arch. Neurol.* 21:559, 1969.
33. Merselis, J.G., Jr., Kaye, D. and Hook, E.W.: Disseminated Herpes Zoster: A Report of 17 Cases. *Arch. Int. Med.* 113:679, 1964.
34. Meyer, R., Brown, H.P. and Harrison, J.H.: Herpes Zoster Involving the Urinary Bladder. *New Eng. J. Med.* 260:1062, 1959.
35. Molin, L.: Aspects of the Natural History of Herpes Zoster. *Acta Derm.—Venereol* 49:569, 1969.
36. Nachman, A.R.: Neurologic Complications of Herpes Zoster. *Pediatrics* 7:200, 1952.
37. Norris, F.H., Dramov, B., Calder, C.D. and Johnson, S.G.: Virus-Like Particles in Myositis Accompanying Herpes Zoster. *Arch. Neurol.* 21:25, 1969.
38. Parsonage, M.J. and Turner, J.W.A.: Neuralgic Amyotrophy: The Shoulder-Girdle Syndrome. *Lancet-*: 973, 1948.
39. Rubin, D. and Fusfeld, R.D.: Muscle Paralysis in Herpes Zoster. *California Med.* 103:261, 1965.
40. Soderbergh, G.: Syndromes Moteurs De L'Abdomen En Presence DeZona Intercostal. *Acta Med. Scand.* 54:170, 1920.
41. Taterka, J.H. and O'Sullivan, M.D.: The Motor Complications of Herpes Zoster. *J. Amer. Med. Assoc.* 122:737, 1943.
42. Taylor, F.: A Case of Shingles Followed by Paralysis of the Abdominal Muscles. *Guy's Hosp. Rev.* 52:37, 1896.
43. Weseley, M.S. and Barenfeld, P.A.: Motor Involvement in Herpes Zoster: Identical Lower Extremity Paresis. *N. Y. State J. Med.* 65:913, 1965.
44. Wright, A.D.: Herpes Zoster Involving Left Quadratus Lumborum and Oblique Muscles with Complete Reaction of Degeneration—Lumbar Pseudohernia in Region of Scars. *Proc. Roy. Soc. Med.* 25:1116, 1932.

Perinatal Tips

By Paul M. Zavell, MD
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The following case from the files of the Wayne County Medical Society Perinatal Mortality Committee is presented as an aid in continuing education.

Maternal

This was the third pregnancy for this 28-year-old woman. Her prior two pregnancies were term and uneventful with two healthy living children now ages 5 and 2 years.

This pregnancy was essentially uneventful with monthly prenatal visits from the third month on until three weeks prior to delivery when she had a severe case of the "flu" (temperature, headache, general aches, chills and cough). She recovered from this without medication except that the sore throat lingered even at the time of delivery.

After a rather short, one hour, 30 minute-labor at 40 weeks pregnancy she delivered her first daughter. Delivery was by low forceps from a right occipital anterior position after an M.L. episiotomy. Spinal anesthesia was used with analgesia during labor of 50 milligrams Demerol and 1/200 grain Scopolamine both intramuscularly 40 minutes before the infant was born. During labor she received 1,000 cc 5% G/W with two ampules of Pitocin added.

The day after delivery the mother ran a temperature of 100.4° (O), was coughing and her throat was quite sore. A CBC showed Hgb. = 15.0 gm., WBC = 11,600, PMN = 77, and lymphocytes = 23. She was placed on Erythrocin, 250 mg tablets 1, qid. A chest X-ray showed "no active or significant intrathoracic disease."

On the second day after delivery she developed a severe spinal headache that was treated with bed rest and Emperin capsule #3. (qid prn). However, she failed to get much relief until 48 hours later when Fiorinal was added. Two days later she was discharged home on no medication. Other studies done were: VDRL = neg., HA&A test = neg., Urinalysis = neg.

Fetal

This eight-pound, 11-ounce white female infant was the third born of a gravida III, para II (III) 28-year-old white mother with B positive blood type. A hasty physical by the obstetrician was done in the delivery room. Since no abnormalities were noted and apgar scores had been 10 at 1 minute and again at five minutes the infant was sent to the nursery with "routine orders" (N.P.O. for 12 hours, then glucose water q4hx3 followed by diluted formula q4hx3 and then full strength formula q4h as tolerated. Additionally, 1.0cc. aqua mephyton was given intramuscularly.)

Thereafter, for the next 90 hours, except for the nurses' notes, the infant had no recorded history (having *not* been seen by any doctor—this particular obstetrician as a routine refers a "normal" infant only on the third or fourth day of life).

However, on the fourth day of life a general practitioner was called in to see the infant. His exam was recorded as normal.

On the morning of the fifth day, the temperature had risen to 100.4° (R) and the doctor was notified. He felt environmental heat probably was playing a part, did not see the infant but ordered G/W between feedings. Two hours later the temperature was 98.8° (R).

However, that evening the temperature had gone to 103° (R) and the infant was irritable. The doctor ordered by phone a CBC, chest X-ray and oral penicillin 125 mg/teasp., ½ teaspoon tid. The infant persisted in being irritable and the temperature ranged 101.6 to 102.6 all night long.

On the morning of the sixth day the doctor resaw the infant and felt he needed help. He called in a pediatrician who examined the infant and found her to be very irritable with 102.6° (R) temperature. There had been no vomiting, diarrhea or lethargy and her physical exam was otherwise normal, and she sucked well. The CBC ordered the evening before revealed: Hgb. = 15.3

(Continued on page 940)

Doctor Zavell is chairman, Neo-Natal and Hospital Care Committee, Michigan Chapter, A.A.P., and chairman, Perinatal Mortality Study Committee, Wayne County Medical Society.

Hydrocephalus and mental acuity

By Thomas F. Mehalic, MD
Glenn W. Kindt, MD
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Carrington reported in this journal in 1959 the results of using a ventriculovenous shunt with a Holter valve as treatment for hydrocephalus.[2] His report was one of the early classic articles in the literature and described the results of treatment of the first 50 patients at the University Hospital. The number of patients treated operatively for hydrocephalus has since risen to 374. Many of the patients described by Carrington, including the first patient operated upon in 1957, are still alive and well. This report is to further update our experience in the therapy of hydrocephalus, particularly with reference to preservation of mental acuity.

Materials and Methods

The clinical material in this study represents the total number of hydrocephalic patients treated on the neurosurgical service of the University Hospital and later the Mott Children's Hospital from 1957 to 1971. The method of therapy consisted primarily of placement of a ventriculo-atrial shunt using a Holter valve. Since the first Holter valve placement in 1957, 374 patients have been treated with a total number of 796 operative procedures. All types of hydrocephalus were included for this study.

The diagnosis of hydrocephalus was established on clinical grounds and substantiated by ventricular or pneumographic studies. More recently it has been customary to insert a combination of radiopaque dye and air during ventricular diagnostic studies rather than air alone. This combination produces little imbalance in the intracranial pressure relationships.[9,10] An effort was made at the time of the first contrast study to identify the site of the obstruction causing the hydrocephalus.

The Holter valve ventriculo-atrial shunts were inserted by the standards methods.[2,7,8] The position of the distal catheter was determined by chest X-ray and in most instances was placed at the D_7 to D_8 level. The position of the proximal catheter was also determined by X-ray to be in the frontal horn one to two centimeters anterior to the coronal suture. The shunt selected was tested prior to insertion to open at 10-20 mm. of H_2O pressure. A seven to 10 day course of an antibiotic was administered during the postoperative period for prophylaxis.

Table 1. Age of Patient

Less than 6 months	233	(62%)
6-12 months	35	(9%)
1-2 years	16	(4%)
2-5 years	11	(3%)
Over 5 years	79	(22%)

The therapeutic goal was to maintain a functioning shunt at all times. Shunts were revised whenever evidence of obstruction occurred. The usual signs or symptoms of a malfunctioning shunt included an abnormal rate of head growth, tight fontanelle, irritability, vomiting and lethargy. The shunts were also removed when signs of acute or chronic infection were present. The 796 operative procedures included the initial placement of the shunting mechanism and all revisions necessary to maintain function. The site of malfunction was documented according to proximal catheter, distal catheter, or inherent defects in the valve itself. Mortality and morbidity related both to the operative procedure and the underlying pathology. Procedures other than the ventriculo-atrial shunt with the Holter valve were included for completeness.

Follow-up studies included periodic repeat neurologic examinations, roentgenographic studies, and psychometric evaluations. When the latter was not obtained, performance in school, as well as parental observations, were substituted. A short questionnaire was mailed for recent updating of the patient's status. Total follow-up studies ranged from less than one year to 13 years. The primary emphasis in the follow-up was placed on obtaining the mental status of the patients.

Results

The age of the patients at the time of the initial diagnosis and treatment is presented in **Table 1.** The great majority of the patients were infants and were treated within the first few months of life. The next largest group consisted of those over five years of age and included many of the late onset aqueductal stenoses, intracranial neoplasms, and adult hydrocephalics.

Doctor Kindt is an associate professor in the Section of Neurosurgery at the University of Michigan Medical Center, where Doctor Mehalic is a resident in neurosurgery.

A listing of the various types of hydrocephalus is presented in **Table 2**. Aqueductal stenosis was the most common cause of obstructive hydrocephalus. The commonest known cause of communicating hydrocephalus was meningitis. All of the cases listed in the Arnold-Chiari malformation group had myelomeningoceles and not all of these had contrast studies. However, many other patients with myelomeningoceles were demonstrated to have either aqueductal stenosis or communicating hydrocephalus and were included in those respective categories. There were 23 cases in which the etiology was undetermined either because no contrast study was performed or the study was inconclusive.

Table 2. Type of Hydrocephalus

OBSTRUCTIVE:	162	(44%)
Aqueductal stenosis	64	(17%)
Neoplasm	46	(14%)
Various etiologies	39	(10%)
Dandy-Walker	13	(3%)
COMMUNICATING:	96	(26%)
Various etiologies or unknown	64	(17%)
Post-meningitis	29	(8%)
Low pressure	3	
Arnold-Chiari	91	(24%)
Unknown type	23	(6%)

The number and the site of the revision procedures are reviewed in **Table 3**. The majority of the patients (65%) had either no revisions or one revision. This number of revisions has been reduced in recent years with the routine radiographic localization of both proximal and distal catheters in the operating room. The number of revisions because of proximal catheter obstruction has fallen sharply since X-ray verification of the catheter in the frontal horn has been standard. In those patients who underwent multiple revisions without resorting to procedures other than ventriculo-atrial shunting, thoracotomy with direct placement of the distal catheter in the right auricular appendage was required on 13 occasions.

Table 3.

NUMBER OF REVISIONS:		
0	89	(33%)
1	85	(32%)
2	37	(14%)
3	20	(7%)
Over 3	37	(14%)
SITES OF REVISIONS:		
Proximal catheter alone	81	(21%)
Valve alone	22	(6%)
Distal catheter alone	75	(20%)
Combination	201	(53%)

The one month operative mortality and the various complications encountered are listed in **Table 4**. Eighteen patients died within one month of the operation, which represents an operative mortality rate of 2.3%. Most of these deaths were due to infections, or to sequelae of the infections such as thrombosis of the superior vena cava or pulmonary emboli. Many of the infections occurred in cases with a pre-existing meningitis with resultant hydrocephalus, or in children with a myelomeningocele that had been allowed to granulate.

Table 4.

ONE MONTH POSTOPERATIVE MORTALITY:		
Meningitis	6	(33%)
Thrombosis superior vena cava	5	(29%)
Pulmonary emboli	4	(23%)
Increased intracranial pressure	1	(5%)
Subdural hematoma	1	(5%)
Intraventricular hemorrhage	1	(5%)
COMPLICATIONS:		
Septicemia	50	(42.0%)
Ventriculitis/meningitis	15	(12.5%)
Thrombosis superior vena cava	10	(8,0%)
Pulmonary emboli	10	(8.0%)
Escape of proximal catheter	9	(7.5%)
Subdural hematoma	8	(6.5%)
Pseudomeningocele/CSF leak	7	(5.5%)
Local infections	5	(4.2%)
Escape of distal catheter	3	(2.6%)
Cardiac tamponade	1	(0.8%)
Epidural hematoma	1	(0.8%)
Pneumothorax	1	(0.8%)
Cardiac arrythmia	1	(0.8%)

A total of 121 complications occurred, representing an incidence of 15%. The most frequent complication was septicemia which occurred postoperatively in 50 patients or 6.3%. The septicemia presented as a fever of unknown origin and required removal of the shunt. Positive blood cultures were obtained in 41 patients, with coagulase negative staphylococcus the predominant organism isolated. These organisms are known to be normal inhabitants of the skin and are probably introduced into the blood stream at the time of the operation. In recent years, the prophylactic use of antibiotics for seven to 10 days postoperatively has resulted in a reduction in the infection rate.

The associated congenital anomalies are listed in **Table 5**. Midline central nervous system defects such as myelomeningoceles, meningoceles, and encephaloceles occurred in 30% of the patients treated for hydrocephalus. These midline anomalies were by far the most common associated defects. Orthopedic abnormalities such as hip subluxation and clubfoot were next most common and occurred in 18% of the patients. Many of these orthopedic anomalies occurred in the patients with myelomeningoceles and were perhaps associated with the nervous system defect.

Table 6 summarizes the follow-up studies. Forty-four of the patients in the study were lost to follow-up. If one either discards these or assumes that they will follow the same distribution as those with follow-up studies, a total population sample of 340 patients remains. Ninety of the 340 patients are known to be dead, which is 27% of the total population.

Patients were determined to be normal or retarded on the basis of the following factors: 1) Standard psychometric examinations when these were available; 2) Whether the children were attending regular school or special education classes; 3) Mental status examinations recorded in hospital records; 4) Parental statements regarding their child's behavior and intelligence. If one requires an intelligence quotient of 90 or greater to be normal, then a total of 127 patients or 53% of the living patients were normal. However, if one accepts 67.5 as a normal intelligence quotient as favored by some psychologists[6] then a total of 152 patients or 63.5% are normal.

Discussion

It has been demonstrated in a study by Foltz that an operative approach to hydrocephalus has significant advantages to children over a program in which no shunting procedures are done.[3] Survival and intelligence are enhanced by proceeding with the direct surgical procedures.[3] It is also our impression that operative therapy for hydrocephalus is worthwhile, particularly with regard to preservation of mental acuity.

The specific operative procedure for hydrocephalus has changed over the years and will undoubtedly continue to evolve. The patients included in this report were treated mainly with ventriculo-atrial shunts using the low pressure Holter valve. This procedure returns the cerebrospinal fluid to the blood stream without loss of electrolytes and does not require sacrifice of any organ as does the ventriculo-ureteral shunts. The technique is similar in both communicating and non-communicating hydrocephalus.

Complications with the ventriculo-atrial shunts do occur as demonstrated in **Table 4**. Septicemia secondary to the foreign body in the blood stream is the commonest complication. It is our impression that septicemia has occurred much less frequently in recent years with the better sterilization techniques of the shunting mechanisms and the prophylactic use of antibiotics. No systematic study correlating the depth of the catheter in the heart with subsequent septicemia was performed because of the radiolucent catheters frequently used. However, our impression is that placing the catheter at a somewhat lower level than recommended by Nulsen[8] does not lead to an increased incidence of infection.

The ventriculo-peritoneal shunt has again been advocated recently to avoid the septicemia due to the foreign body in the blood stream.[1,5] Perhaps these peritoneal shunts will gain uniform popularity. Our experience with these shunts in the past has been somewhat disappointing because of the frequent obstruction at the peritoneal end. Another concern is the possibility that the peritoneal end of the shunt may be partially obstructed over a long period. This partially functioning shunt may work well enough to prevent abnormal head enlargement but not well enough to prevent ventricular dilatation and brain damage. The low pressure ventriculo-atrial shunt seems to work in an all-or-none manner which brings the child in for a revision soon after a malfunction. Many of the patients in this series have normal intelligence quotients despite several shunt revisions.

Table 5. Associated Congenital Anomalies

CENTRAL NERVOUS SYSTEM:	141	(65%)
Myelomeningocele	97	
Meningocele	4	
Encephalocele	10	
Porencephaly	8	
Hypoplasia/angenesis	9	
Craniosynostosis	5	
Neurofibromatosis	3	
Tuberous sclerosis	2	
A-V anomaly with vein of Galen	1	
Sturge-Weber syndrome	1	
Platybasia	1	
ORTHOPEDIC:	39	(18%)
Hip subluxation	22	
Talipes equinovarus	16	
Syndactyly	1	
CARDIAC:	13	(6%)
Patent ductus arteriosus	4	
Septal defect	9	
RENAL:	4	(2%)
Polycystic kidney	1	
Horseshoe kidney	3	
MISCELLANEOUS:	19	(9%)

Table 6. Follow-Up

No follow-up	(12% of total sample)
Dead	(27% of those followed)
Normal (IQ over 90)	(53% of living patients)
Normal (IQ over 67.5)	(64% of living patients)

No follow-up studies on the mental abilities of patients treated with ventriculo-peritoneal shunts yet exists which can compare with those of Foltz and others using ventriculo-atrial shunts.[3] Perhaps it would not be prudent for everyone to change the type of shunt used until such data becomes available. We have employed the ventriculo-peritoneal shunt mainly for revisions when septicemia had been present or the right atrium could not be catheterized.

Summary

A total of 374 patients treated for hydrocephalus between 1957 and 1971 were analyzed with emphasis on the results of operative therapy and the preservation of mental abilities. A ventriculo-atrial shunt with a Holter valve was the primary therapy employed. The shunts were revised whenever evidence of obstruction occurred. Ninety or 27% of the patients are known dead. Of the remainder 53% have an intelligence quotient over 90 and 63.5% have an intelligence quotient over 67.5.

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gm., Hct = 48, WBC = 32,184, PMN = 45, Bd = 32, Lymph = 21, Mono = 02 and the chest X-ray was negative.

The pediatrician felt that this was probably an infant with "sepsis." He placed the infant in isolation, took blood, nose, throat, and ear cultures, canceled the oral antibiotic and started aqeous crystalline penicillin 100,000 units intramuscularly q8h and Kantrex 30 mg intramuscularly q12h. No IV was started since sucking and fluid intake was excellent (despite the temperature and irritability).

Twenty-four hours later, with the infant still running 100.8° to 101.8° (R) temperature, all the cultures revealed "Beta Hemolytic streptococcus of group 'D' "—later shown to be sensitive to penicillin but poorly to Kanamycin. After an additional 24 hours the temperature became normal (approximately 99°) and stayed there. In another 12-24 hours all signs of irritability disappeared. When a repeat blood culture was reported as negative for growth the intramuscular Kantrex was stopped but intramuscular penicillin was continued at 12 hour intervals. The infant was taken out of isolation.

After a total of seven days intramuscular penicillin and four days of normal temperature, penicillin was then stopped. Twenty-four more hours of observation revealed a completely normal female infant in all ways and she was discharged home. Final diagnosis was "Beta Hemolytic streptococcal group D sepsis in a living term white female infant."

Perinatal Committee Comments

1. It is extremely poor medicine to hastily examine an infant after birth and then to allow the infant to be placed in a newborn nursery unfollowed by a doctor for several days and watched only by the nursery nurses using "routine orders." Infants appearing "normal" right after birth may not really be so, for great and sudden changes (many times only revealed by physical exam) can and do occur in infants in the newborn period. Orders for each infant should be individualized. The committee frowns upon "routine orders."
2. There is *no* excuse for not seeing a sick infant in the nursery but rather treating such over the phone. A nurse is just that, a nurse—and medical diagnoses cannot be made with any real degree of accuracy over the phone. The infant's "sick" condition can become irreversible in a few hours if an improper diagnosis and consequent withholding of appropriate therapy occurs. A sick newborn deserves the best that his physician can give him.
3. The use of oral rather than parenteral antibiotics in a sick newborn is subject to possible inadequate absorption with resulting inappropriate blood levels. Additionally, and as important, is the great possibility of iatrogenic diarrhea resulting here that may well add to the dangers facing such an infant.
4. Although nothing untoward occurred here it is felt that intravenous fluids are preferred in a sick infant receiving parenteral antibiotics rather than oral fluids only.
5. Although it is true that CBC's on newborn infants show elevated white blood cell counts to 25,000, the finding of such counts (or higher) after six days of life in combination with the left shift of the differential blood smear should alert one to the possibility that infection may be present.

References

1. Ames, R. H.: Ventriculo-Peritoneal Shunts in the Management of Hydrocephalus. *J. Neurosurg.* 27: 525-529, 1967.
2. Carrington, K. W.: Ventriculo-Venous Shunt Using the Holter Valve as a Treatment of Hydrocephalus. *J. Mich. State Med. Society.* 58: 373-383, 1959.
3. Foltz, E. L. and Shurtleff, D. B.: Five-Year Comparative Study of Hydrocephalus in Children With and Without Operation, (113 Cases). *J. Neurosurg.* 20: 1064-1079, 1963.
4. Hagberg, B. and Sjorgen, I.: The Chronic Brain Syndrome of Infantile Hydrocephalus. *Amer. J. Dis. Child.* 112: 189-196, 1966.
5. Hammon, W. M.: Evaluation and Use of Ventriculo-Peritoneal Shunt in Hydrocephalus. *J. Neurosurg.* 34: 792-795, 1971.
6. Heber, R.: A Manual on Terminology and Classification in Mental Retardation. *Monograph Supplement to Am. J. of Mental Deficiency.* p. 59, 1961.
7. Matson, D. D.: Neurosurgery of Infancy and Childhood. 2nd Ed., Charles C. Thomas, Springfield, 1969.
8. Nulsen, F. E. and Becker, D. P.: Control of Hydrocephalus by Valve Regulated Shunt. *J. Neurosurg.* 26: 362-374, 1967.
9. Pudenz, R. H.: The Ventriculo-Atrial Shunt. *J. Neurosurg.* 25: 602-608, 1966.
10. Taveras, J.M. and Wood, E. H.: Diagnostic Neuroradiology. Williams and Wilkins, Baltimore, 1964.

Delirium tremens and sleep deprivation

By Richard C. Bates, MD
Lansing

Introduction

Failure to identify the cause of delirium tremens has led to an array of therapeutic regimens that are not the same in any two institutions. Often included are "cocktails" and intravenous infusions of vitamins, ACTH, anabolic steroids, sodium, magnesium, calcium, glucose, insulin and various sedatives, hypnotics and tranquilizers, of which chlordiazepoxide and promazine are currently popular,[1-9] while paraldehyde and even alcohol still have their champions.[10,11]

These expensive remedies persist despite the experimental induction of D.T.'s in well-fed volunteers by Isbell[12] and Mendelson[13] and their associates who thus absolved nutritional deficiencies as the cause of hallucinations and pointed strongly to withdrawal phenomena. It is difficult to understand how nutritional factors could have ever had such strong champions when one reflects that no deficiency state of vitamins or ions has ever been described as being associated with visual hallucinations in non-alcoholics.

At the same time, a direct effect of prolonged alcohol poisoning cannot be implicated as the cause when identical hallucinatory states occur even more frequently upon withdrawal from hypnotics.[14]

With much evidence pointing to an association of lack of rest, withdrawal rebound and agitation with delirium tremens it is surprising that no one has remarked on the close similarity of the effects of experimental sleep-deprivation with the hallucinations of delirium tremens.

Bliss, et al.[15] produced visual hallucinations in all of seven medical students deprived of sleep for 72 hours. Several of the subjects reported "waking dreams" and confusion over time relationships. One reported, "As I walked down the hall I thought I saw an old lady sticking her head out of the room . . . ten yards from her I realized it was a fire alarm box." Another reported seeing a roll of luminous chicken wire on the floor.

Morris, et al., report two studies[16,17] of normal males deprived of sleep for 72 to 98 hours and refer to "lapses" which often occur in the middle range between sleep and wakefulness and find that they are most apt to occur between midnight and dawn. They can be prevented by keeping the subject interested in conversation, but they increase with monotony and become more difficult to control as deprivation increases.

During a "lapse" a subject may progressively lose his grasp of a situation such as being aware of people talking but being unable to comprehend the content. Intrusive thoughts or dreams may combine with external events to produce distorted perception or behavior.

They report that the most frequent changes noted were in preception and were at times "so extreme as to deserve the label 'hallucinations.'" Of 26 subjects sleep-deprived for these periods, 12 hallucinated, seeing such things as a black mark changing into a rock formation, hairs in a glass of milk, dogs in the hall and mistaking a Rorschach card for an envelope with the subject's name and address on it.

After 40 to 60 sleepless hours their subjects were usually able to recognize that they were having visual hallucinations, but after 65 hours some developed considerable confusion about the reality of these misperceptions. One subject noted cobwebs covering his hands and face and tried to wash them off. Even after recovery he could not be convinced that this event had not actually occurred.

These authors suggest that such "lapses" are actually dream phenomena overwhelming reality in individuals deprived of what may be a physiologic need of the human brain to indulge in fantasies.

The presence of visual hallucinations in solitary transoceanic sailors whose voyages may require several days of unremitting vigilance has been recently reported in the press.

Accordingly, it seems likely that delirium, the cardinal feature of D.T.'s, is simply a matter of sleep deprivation. It is to be noted that Mendelson, et al., reported that the four of their 10 patients in experimentally-induced withdrawal states who did hallucinate did so in association with severe insomnia.

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Delirium tremens probably occurs more readily in naturally occurring D.T.'s when sleep is made difficult by painful injuries, coughing attacks, noisy environments and the frequent necessity of acquiring a new supply of beverage.

It would appear that a quart of whiskey should produce long periods of sleep, but the reaction of the alcoholic to alcohol may be quite different from that of the non-drinker.[13] Interviews with those recovering from a binge confirm that, in the final stages, they are unable to get rest from any dose of alcohol and are invariably without restful sleep for long periods before hallucinations occur. In time, the hypnotic effect of alcohol is overwhelmed by the physical and psychologic suffering that pyramid with prolonged inebriation and the subject sleeps in brief snatches, interrupted by excursions to the bathroom, searches for a new supply, another pull on the bottle and the lighting of innumerable cigarettes.

If sleeplessness is the cause, then rest should be the treatment. Recently there has been considerable evidence that the use of tranquilizers has reduced the mortality almost to zero from previous rates of around 10%

Tavel[18] wrote in 1962, "Theoretically, the ideal management would be to begin with large enough doses of one of these drugs to produce a state bordering on light sleep and to taper the dose over the next seven to 10 days," while Fraser, et al.,[14] stated that, "It is logical to assume that when clinicians administer barbiturates and possibly other hynpotics to alcoholics having delirium tremens they are correcting a deficiency of alcohol by partially specific substitution therapy. Furthermore, a gradual reduction of sedatives should make possible a gradual rather than a precipitous loss of physical dependence on alcohol, thus preventing the appearance of convulsions and delirium."

Dean[19] advocates sleep as a specific lifesaving treatment for D.T.'s, although he warns of the dangers of giving barbiturates and advocates restoration of fluid and electrolyte balance and administration of vitamins.

Moroz and Rechther[20] believe that a most important, if not *the* most important, part of treatment is sedation; that over-sedation is preferable to under-sedation and a deep and prolonged sleep is perhaps more curative than all other measures combined.

Since adequate sedation has already been shown to eliminate mortality, the effectiveness of a regimen must now be measured in terms of shortening the period of morbidity in terms of the speed with which an hallucinating patient can be brought to orientation and participation in psychotherapy.

Figurelli in one report[6] stated that the use of promazine reduced the average duration of delirium from seven to three and one-half days and in a later report[7] gives averages of 4.7 in uncomplicated and six days in complicated D.T.'s. Lundquist[21] reports an average duration of three days in 74 cases, and others report reduction to even shorter periods.[1,2,9] It is apparent from these reports that the heavier the sedation schedule the lower the mortality and the shorter the duration of hallucinations.

For production of sleep no class of drugs is superior to the barbiturates, but their use is almost universally condemned in the treatment of D.T.'s on the bases that they cause respiratory depression, might theoretically depress liver function or are addicting. Yet none of these objectives is valid in our experience, or at least the barbiturates are no worse than any of the other tranquilizers in these respects and far superior to tranquilizers in both their hypnotic and anti-convulsant properties. (This is not to say that we advocate administration of oral barbiturates to out-patients or over prolonged periods.)

Material and Methods

Since April 1961 we have used barbiturate-induced sleep therapy in the treatment of 34 cases of delirium tremens in 2,100 admissions for alcoholism to the Alcoholism Unit of the E. W. Sparrow Hospital. Delirium tremens is defined by us as a state characterized by visual hallucinations in an individual who has been drinking heavily in the recent past.

At the first evidence of hallucinations, patients are put into relaxed sleep of such depth that all tremors and muscle resistance cease and minimal responses occur to painful stimuli.

This is accomplished by intravenous intermediate barbiturates.* To a liter of 5% glucose in water, we add 1.0 gm. of the drug so that each 100 ml. of solution is equivalent to the conventional sleeping pill. This bottle is connected by a "Y" tube to a bottle of some other intravenous solution so that the infusion can be maintained and the needle kept free of clots during the long periods when the barbiturate bottle is closed off. Generally no more than 1000 ml. of this second solution are used in 12 hours.

On induction, 200-300 ml. of the barbiturate mixture are run in rapidly and then five to 10 minutes are allowed to gauge the effect. From then on, the solution is added in 100 ml. doses (0.1

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*We use sodium pentobarbital but there is no apparent reason why others would not work as well.

Table I

Number of Cases:	32
Male	27
Female	5
Age Groups:	
33 - 40	2
41 - 50	11
51 - 60	19
Total Dose of Sodium Pentobarbital Administered:	
0 - 0.5 gms.	8
0.6 - 1.0 gms.	11
1.1 - 1.5 gms.	5
1.6 - 2.0 gms.	4
2.1 - 2.4 gms.	4
Number of 8-Hour Infusions:	
1	25
2	6
3	1
Duration of Hallucinations from the Start of Therapy:*	
12 - 24 hours	16
25 - 36 hours	6
37 - 48 hours	6
49 - 60 hours	1
61 - 72 hours	2
5 days	1

*Times given can only be approximate since most patients have a period of natural sleep after therapy of up to eight hours in duration from which they awaken free of aberration. We have taken the first notation on the chart that the patient was alert and oriented as the time of cessation of hallucinations.

gm.) to keep the patient in continuous sleep for 8 hours.

After this the patient is allowed to awaken naturally, usually in an hour or two. He is helped to the bathroom and then hand-fed with soft foods and returned to bed.

In those cases where hallucinations persist, a second course of 12 hours sleep is given as soon as the patient has spent an hour sitting in a chair. In one instance a third course was required. A period of several hours of natural sleep usually signals the end of D.T.'s, a phenomenon noted by others.

Sedation with phenothiazines during the day and barbiturates at night is carried on for a few more days. On a few occasions we have seen a patient recovered from hallucinations slip back into them, but this almost always indicates delayed withdrawal from unsuspected barbiturate addiction.

We allow experienced nurses to initiate and carry on therapy without immediate supervision from a physician. For no reason does the nurse ever leave the bedside while barbiturates are being administered, but otherwise she may leave the patient alone for brief periods.

It is important that adequate sedation be given, which means that dosage must be entirely determined by the patient's responses. In some cases, huge doses of over 2.0 gms. of barbiturates have been used in agreement with Dean[19] that "cases of delirium tremens require such large doses (of sedation) that an inexperienced physician may not give enough. One should not rely on fixed dosages but should 'titrate' the dosage against the patient's tension."

Undoubtedly, the well-known tolerance of alcoholics to sedatives provides considerable protection from over-depression of vital functions.

This treatment has been carried out in the presence of pneumonia, fever and surgical conditions; in fact, we consider them indications for this therapy. It might be contraindicated in the presence of suspected head trauma because of the obvious interference with neurologic examinations.

In no instance have we made attempts to hydrate patients or correct their ionic balance. We have not used vitamins, either oral or intravenous, steroids, magnesium or amino acids. Since most patients are eating within 12 hours they fill their own nutritional needs quickly, painlessly and inexpensively.

Results

We have had no deaths and no instances of laryngospasm or aspiration of vomitus. The average duration of hallucinations in these 32 cases was 29.7 hours and this average is raised by four patients who were not properly treated by our present standards. (See **Table I** for details.)

Discussion

It appears that in our search for some complex toxic or chemical cause for delirium tremens we have overlooked a simple and obvious one. Actually, very little attention has been given by clinicians to the results of sleep deprivation. It was only the impetus of concern over "brain washing" techniques that led to the recent discoveries that many normal people have "waking dreams" if kept from sleep for three or more days. That there is an individual susceptibility to this phenomenon is indicated in the studies cited and may explain why some alcoholics of considerable severity never hallucinate.

It would appear that the evidence for an association of D.T.'s and sleeplessness rests on the following observations:

1. Normal people deprived of sleep may have visual hallucinations which occur in the same fashion and are of the same nature as those of delirium tremens.

2. Patients with delirium tremens are always wakeful before the delirium and recover after a period of restful sleep.

3. Induction of artificial sleep aborts delirium, usually in 12 to 24 hours, in the absence of any other therapy.

4. No other thesis for the etiology of D.T.'s is as consistent with the facts. No other nonalcoholic state as closely resembles D.T.'s as the sleep-deprived state.

If sleep is therapeutic it should also be a preventative for D.T.'s. While it is difficult to prove that one prevents a disease, we have the distinct impression that this is true. It is a standing order on our Unit that any alcoholic who does not have a restful period of sleep within the first 24 hours of admission must be given pyramidding oral doses of sedatives and be considered for sleep therapy.

Even were it not for the obvious benefits of this treatment in reduction of the duration of delirium and elimination of mortality, it recommends itself solely on the basis of economy. The cost of medication is minimal compared with that of vitamins, steroids and insulin while the depth of sedation eliminates the need for personnel to hold the patient down. The wildest patient can be treated quietly on the open ward without restraints.

Conclusion

Normal subjects deprived of sleep for over 72 hours often develop hallucinations that closely parallel delirium tremens. Patients with delirium tremens are always deprived of sleep before they hallucinate and they recover with sleep. Induction of artificial sleep with barbiturates given intravenously has been safe and convenient in our hands and has reduced the duration of morbidity to an average of 29.7 hours in 32 consecutive cases. Accordingly, we regard sleep as the specific preventative and treatment of this condition and sleeplessness as the cause.

Bibliography

1. Kefman, O.: Experience with reserpine and perphenazine in acute alcoholic intoxications and alcoholic psychosis. *Canad. Med. Ass. J.* 79: 988, 1958.
2. Laties, V.G.: Controlled trial on chlorpromazine and promazine in management of delirium tremens. *Q. J. Stud. Alc.* 19: 238, 1958.
3. Gruenwald, F., Hanlon, T.E., Wachsler, S. and Karland, A.A.: Comparative study of promazine and triflupromazine in the treatment of acute alcoholism. *Dis. Nerv. Syst.* 21: 32, 1960.
4. Giacobini, E. and Salum, I.: Treatment of delirium tremens; a comparative study of different therapeutic methods in 434 cases. *Acta Psychiat. Scand.* 37: 198, 1961.
5. Hart, W.T.: A comparison of promazine and paraldehyde in 175 cases of alcoholic withdrawal. *Am. J. Psychiat.* 118: 323, 1961.
6. Figurelli, F.A.: Delirium tremens: reduction of mortality and morbidity with promazine. *JAMA* 166: 747, 1958.
7. Figurelli, F.A., Davis, R. and Figurelli, J.: Severe and complicated delirium tremens: results of promazine therapy in a selected group. *Medical Times* 90: 1347, 1962.
8. Salsberger, G.J.: Treatment of acute alcohol poisoning in a state mental hospital. *Dis. Nerv. Syst.* 25: 293, 1964.
9. Salsberger, G.J.: Management of alcoholism with promazine. *Dis. Nerv. Syst.* 25: 33, 1964.
10. Thomas, D.W. and Freedman, D.X.: Treatment of the alcohol withdrawal syndrome. Comparison of promazine and paraldehyde. *JAMA* 188: 316, 1964.
11. Halvorsen, M.H. (Letters): *JAMA* 192: 1013, 1965.
12. Isbell, H., Fraser, H.F., Wikler, A., Belleville, R.E. and Eisenman, A.J.: An experimental study of the etiology of "rum fits" and delirium tremens. *Quart. J. Stud. Alc.* 16: 1955.
13. Mendelson, J.H.: Experimentally induced chronic intoxication and withdrawal in alcoholics. Part 10. Conclusions and implications. *Quart. J. Stud. Alc.*, Suppl. No. 2, 117, 1964.
14. Fraser, H.F., Wikler, A., Isbell, H. and Johnson, N.K.: Partial equivalence of chronic alcohol and barbiturate intoxications. *Quart. J. Stud. Alc.* 18: 541, 1957.
15. Bliss, E.L., Clark, L.D. and West, C.D.: Studies of sleep deprivation: relationship to schizophrenia. *A.M.A. Arch. Neurol. Psychiat.* 81: 349, 1959.
16. Morris, G.O., Williams, H.L. and Lubin, A.: Misperception and disorientation during sleep deprivation. *A.M.A. Arch. Gen. Psychiat.* 2: 247, 1960.
17. Morris, G.O. and Singer, M.T.: Sleep deprivation. *A.M.A. Arch. Gen. Psychiat.* 5: 453, 1961.
18. Tavel, M.E.: A new look at an old syndrome: delirium tremens. (Editorial) *Arch. Int. Med.* 109: 129, 1962.
19. Dean, E.S.: Treating delirium tremens. *Western. Med.* 5: 187, 1964.
20. Moroz, R. and Rechter, E.: Management of patients with impending and full-blown delirium tremens. *Psychiat. Quart.* 38: 619, 1964.
21. Lundquist, G.: A comparative study of pathogeneses, course and prognosis with delirium tremens. *Acta Psychiat, et Neurol. Scand.* 36: 443, 1961.

The Detroit Surgical Society:

“striding firmly into new responsibilities”

By Susan L. Jeffries
Detroit Free Lance Author

After 19 years the Detroit Surgical Society has accomplished its original goal and moved ahead to fix upon new objectives.

Established in April, 1953, by a small group of surgeons, the DSS was founded to stamp out fee-splitting, ghost surgery, and unnecessary surgery. These have been virtually eliminated in every major hospital in Detroit.

Another role which the DSS still is contemplating is that of the reviewer in peer review actions.

The original raison d'etre for the DSS has evaporated. It is now looking into other areas where it might be of service.

The DSS recently offered to serve as the agent in binding arbitration in disputes between hospitals, doctors, or insurance companies in any capacity which might be required.

Another recent offer was to serve as an advisor to any hospital having difficulties with its delivery of surgical services.

Though only recently revealed, the DSS's new roles as arbitrator and advisor have been greeted with much enthusiasm by hospitals and doctors alike.

Though the DSS does no formal research, it is beginning to get involved in the training and education of surgeons. It is promoting several seminars with Wayne State University that will discuss and demonstrate the latest techniques in fields intimately related to the practice of surgery. Not only doctors, but also nurses, technicians and students will be invited. Its most recent effort toward this end was a three-day “Critical Care Seminar” May 10-12.

Planning to Publish Handbook on Ethics

For new doctors, the DSS is now in the process of publishing a handbook that will help recent graduates and residents set up their practices and avoid the problems which befall many new doctors. The handbook is designed to be a shorter, simplified version of the American Medical Association book on the ethical practice of medicine. It will include not only bookkeeping procedures which produce good control, but also answers to questions which might be posed by the Internal Revenue Service.

The DSS has not previously been involved in the setting of fees; but fears, with many others, that “consumerism” will soon have the government setting fees if the medical profession does not establish an acceptable schedule first.

Doctor Tuttle Served As First DSS President

When surgeons were invited to the organizational meeting for DSS, more than 300 gathered at the Herman Keifer Hospital.

William Tuttle, MD, a chest surgeon at Harper Hospital and chairman of the organizing steering committee was elected the first president; James B. Blodgett, MD, a vascular surgeon at the Grace Hospital was elected president-elect; Duncan Cameron, MD, surgical instructor at Wayne State University, secretary; Don McLean, MD, intestinal surgeon at the Grace Hospital, treasurer; and William S. Carpenter, MD, general surgeon at Harper, auditing officer.

The main purpose of the DSS is stated in the constitution as “To make available a means by which the organization may continuously verify the high ethical standards of its members.”

The support of hospitals and surgeons provides the means to employ outside auditors to verify that the source and use of all professional income conforms with these high ethical standards.

The DSS does not actively seek out the fee-splitters but rather tries to convert them by “moral persuasion.” It is an attempt by doctors and hospitals to police themselves, and guarantee the ethical practice of medicine before the government decides to step in and do it.

Some doctors felt that they were ethical and honest already and did not have to join the DSS to prove it. Those who did join saw membership

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not as proof of honesty but an indication of support for an ideal.

To Invite Hospitals To Become Members

The DSS soon hopes to include hospitals as members. Hospital members have to agree to and support the same principles and ethical standards as the individual doctors. They also agree to cooperate in supplying information on doctors during audits. In the future, the DSS hopes that all hospitals will require membership in the DSS as partial fulfillment of JCHA requirements.

Two hospitals, Sinai and Blain, now require that their surgical staff either belong to the DSS or provide an audit to prove that they are not splitting fees. The DSS's annual audit fee of $25 is less expensive than an individual audit.

The American College of Surgeons lends its force by strongly urging those fellows who resign from or are expelled from the DSS to reconsider their membership. ACS also makes inquiries of new applicants as to whether they already belong to the DSS. Those who do, find fellowship almost a fait accompli.

DSS Began in 1953 To Halt Fee Splitting

The basic idea in 1953 for the DSS came from groups in Columbus, Ohio, and Bloomington, Ill., where similar societies had been established. Both had been highly successful in the elimination of fee-splitting and other unethical practices.

No city of Detroit's size or stature had ever attempted such a thing.

Praise came from the American College of Surgeons who said they had been trying to rid the College of fee-splitting malpractitioners for 40 years. The Detroit doctors set out to prove, with Columbus and Bloomington, that the problems could be eliminated, with enough determination.

On April 21, 1953, more than 300 of the estimated 1,000 surgeons in the Detroit area were members of the Society. By July 1, the deadline to end fee-splitting, the DSS had 534 members pledged against it.

The individual audits did not begin until June, 1954.

Any Doctor Who Performs Surgery May Join

The DSS is open to any Doctor of Medicine in good standing with the American Medical Association, who performs surgery - even if that surgery is only one tonsillectomy per year.

The applicant must apply in writing and be approved by the membership. He must pledge to practice ethical medicine in accordance with the aims of the Society and abide by its rules. He must also sign a waiver allowing the authorized DSS auditor to review his accounts at any time.

Every new member, all DSS Council members, and 25% of the general membership are audited every year. The audit includes not only a review of the doctor's personal books, but also a review of his hospital accounts and interviews with his patients.

Where irregularities are found, the doctor is asked to explain them to the Audit Committee by letter. If the written explanation is not satisfactory, he is invited to appear before the Council.

Doctors who are found guilty of unethical practices are expelled from the Society. The American College of Surgeons and the hospitals at which he practices are notified of the expulsion.

Advocates Expansion To Other Cities

The Society accepts as active members only those practicing in Greater Metropolitan Detroit-Wayne, Oakland, Macomb and Washtenaw Counties. Many feel that this is a "provincial attitude" and that the DSS should move to establish branches or accept members throughout the state. The Society's leaders feel, however, that by dispersing their membership over a much larger area, they would be diluting their impact on any area.

The current president, Ernest M. Berkas, MD, agrees that the DSS idea should be expanded and that a number of nuclei throughout the state would be a great benefit to the practice of surgery in Michigan. Doctor Byberg is very much interested in helping such nuclei get organized, but he feels that such a movement should be promoted by the Michigan State Medical Society. "In this way, each group would be autonomous and highly effective in its own area, yet still able to cooperate with the others," says Doctor Berkas.

DSS Determined to Move Into Other Activities

Twenty years ago the problem of fee-splitting was nationwide. Now there are only pocket areas where the problem persists. Surgical societies and hospitals throughout the country have found they can eliminate the rascals if they really want to.

The Detroit Surgical Society has not discarded nor dismissed its original purpose. The need for a watchdog is still there, to prevent the original problem from recurring. Its role as supervisor of professional ethics is now much easier due to better bookkeeping procedures by doctors and more cooperation from hospitals. Most Detroit area surgeons adhere to the DSS's ideals, whether they are members or not.

It is now the role of advisor that will take on greater importance and the DSS is striding firmly into many new areas of responsibility - peer review, arbitration, surgical education. The DSS does not appear to be about to dissolve or atrophy. The same jaw bone is about to attack new Philistines.

More Annual Session photographs

The Michigan Doctors Political Action Committee, in its annual luncheon Monday, Oct. 2, was host to keynote speaker Richard Austin, Michigan Secretary of State, right. Welcoming him to the luncheon were Louis R. Zako, MD, Westland, left, MDPAC chairman, and MSMS President John J. Coury, MD, Port Huron.

Other key figures at the MDPAC annual Luncheon were, from left, Thomas J. Setter, MD, co-chairman of the luncheon (with Robert J. Solomon, MD); Vernon V. Bass, MD, MSMS Speaker; U. S. Congressman James Harvey, Saginaw, second keynote speaker at the luncheon, and Mrs. Charles Schoff, Midland, then president of the Woman's Auxiliary to MSMS.

Recognition was given by the MSMS House to four staff members for their respective years of good service. Kenneth Johnson, MD, MSMS secretary, presented pins.

Margaret Berry, five years

Mary K. Brewbaker, 15 years

Richard Campau, 10 years

Vada L. Davis, 20 years

The highest MSMS awards, honoring Michigan physicians for outstanding contributions to medicine and their communities, were presented at the 1972 Annual Session to the five physicians below. Making the awards were Kenneth Johnson, MD, MSMS secretary, left in top right photo, and Sidney Adler, MD, then MSMS president.

Lawrence Bateman, MD, Flint

Dean Burns, MD, Petoskey

Elisha Gurdjian, MD, Detroit

Robert Nalbandian, MD, Grand Rapids

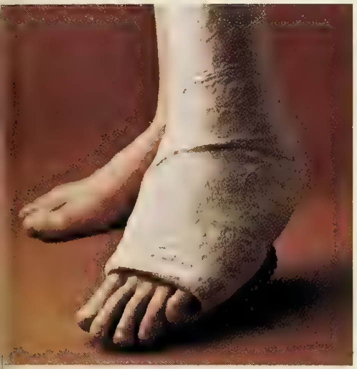
Arthur Stanley, MD, Lansing

Distinguished physicians who have practiced medicine for 50 years were recognized in special ceremonies Oct. 3 before the MSMS House. Pins were presented by then-President Sidney Adler to each of the 14 physicians present, including, from left, Colonel R. Henry, MD, Ferndale; Angus G. Goetz, MD, Detroit; Lloyd S. Dunkin, MD, Greenville (partly obscured); and George M. Brown, MD, Bay City.

The pin signifying leadership of the Woman's Auxiliary is passed during the auxiliary's annual meeting Oct. 2-5 in Detroit from Mrs. Charles (Marian) Schoff, Midland, retiring president, right, to Mrs. Fleming (Marian) Barbour, Flint, 1972-1973 president.

HERE

Fractures



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By moderating excessive vagal currents Pro-Banthine relieves spasm, acid burn and pain. By reducing gastric motility Pro-Banthīne also prolongs the activity of antacids.

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Contraindications: Glaucoma, obstructive disease of the gastrointestinal tract, obstructive uropathy, intestinal atony, toxic megacolon, hiatal hernia associated with reflex esophagitis or unstable cardiovascular adjustment in acute hemorrhage.

Warnings: Patients with severe cardiac disease should be given this medication with caution. Fever and possibly heat stroke may occur due to anhidrosis.

In theory a curare-like action may occur, with possible loss of voluntary muscle control. For such patients prompt and continuing artificial respiration should be applied until the drug effect has been exhausted.

Diarrhea in an ileostomy patient may indicate obstruction, and this possibility should be considered before administering Pro-Banthīne.

Precautions: Since varying degrees of urinary hesitancy may be evidenced by elderly males with prostatic hypertrophy, such patients should be advised to micturate at the time of taking the medication.

Overdosage should be avoided in patients severely ill with ulcerative colitis.

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Here is recap of truimphs, defeats for medicine in 1972 Michigan legislation

By Bruce Ambrose, Manager
MSMS Department of Government Relations

Repeal of the 1937 Basic Science Act, which for 35 years stood as a barrier to physician recruitment to Michigan, highlights medicine's achievements in Michigan's Legislature, as the 70th Legislature works toward its final adjournment.

The Legislature will have recessed for campaign activity on Oct. 6. Current plans are to reconvene for final action Nov. 27 through Dec. 15.

MSMS was the foremost proponent of the basic science act repeal last spring. It was strongly supported in its effort by both political parties, the UAW, AFL-CIO, Department of Licensing and Regulation, Department of Public Health, and the Department of Mental Health. Rep. Joseph Snyder (D-St. Clair Shores) and Rep. William Jowett (R-Port Huron) sponsored the measure in the House that finally was enacted; Senator Philip Pittenger (R-Lansing) offered the bill in the Senate.

Governor Milliken, who also supported the repealer, signed the bill into law June 16.

Basic Science repeal headed a list of goals authorized by The MSMS Council for 1972. Others included revision of the Medical Practice Act, which was originally enacted in 1898 and often amended in the intervening 74 years. The proposal is designed to liberalize the requirements for licensure and give some discretion to the licensing board in dealing with individual cases. A limited license, a "sick doctor's act," access to the Board of Registration through a lay-dominated advisory committee, and adjustments in educational requirements are embodied in the revision. The bill was developed through the cooperation of The Council and the Board of Registration.

In its first exposure to the Legislature, the bill won approval from the House Committee on State Affairs, then languished in the House Appropriations Committee. Further action in 1972 is unlikely. The bill will be re-introduced early in 1973.

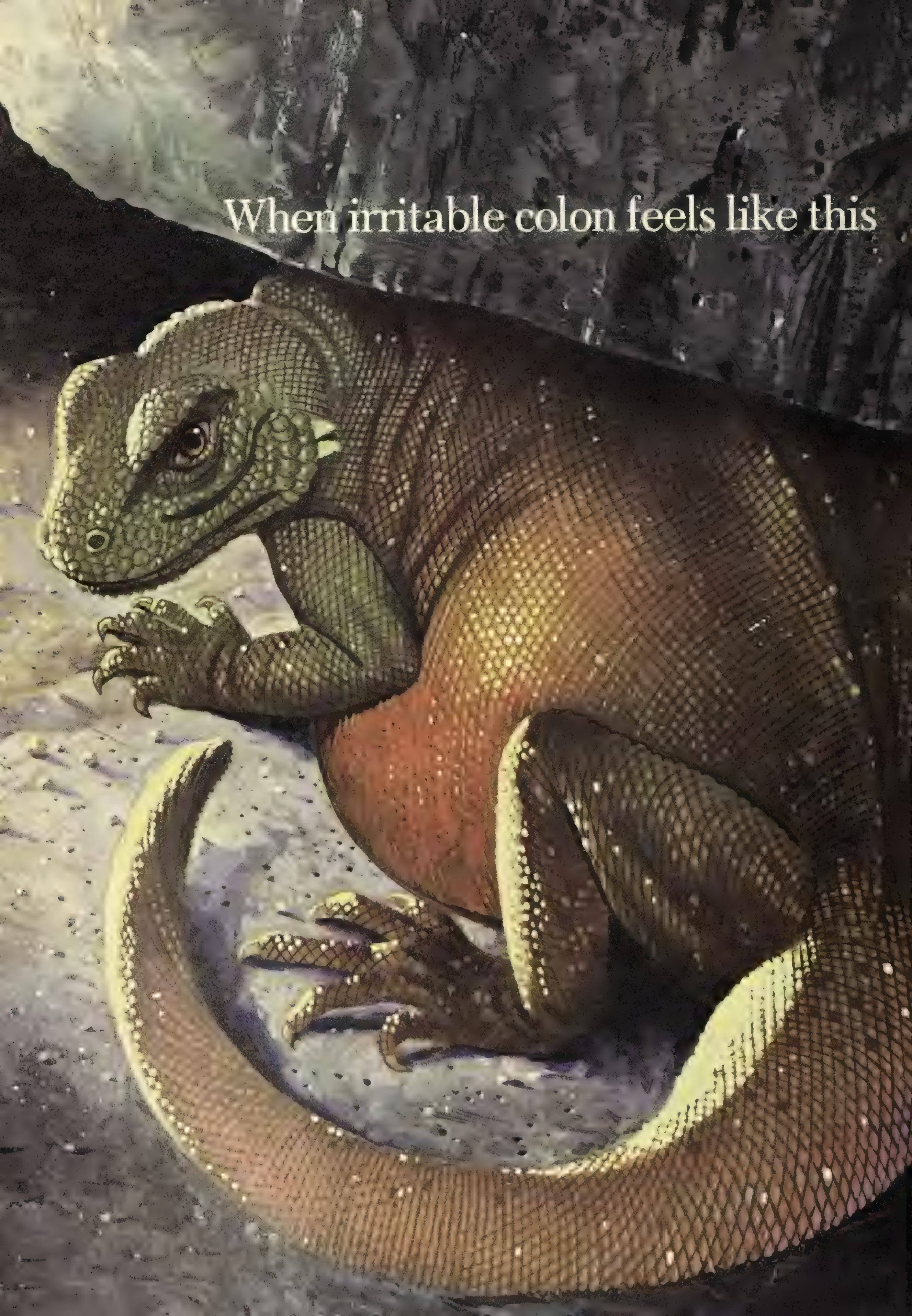
Attempts to establish the worker category of "Physician's Assistant" attracted some notice among legislators but fell short of achievement. The Council authorized a position that, if and when physician's assistants are recognized by Michigan law, they should be under the direct authority and regulation of the Board of Registration in Medicine.

Legislative efforts also were directed by MSMS to several appropriations matters. Strong MSMS reaction to the Governor's proposal that Medicaid billings, paid within 30 days, be discounted by three per cent, won support among the Legislature and ultimately by the Governor himself, who informed MSMS in May that he had withdrawn the recommendation.

MSMS monitored and provided information to legislators in the development of the Medicaid portion of the Department of Social Services appropriations bill, as well as advising on appropriations for medical schools in the state. Subsequent legislation provided $72 million for the physician line item in Medicaid, up $18 million from the fiscal 1971-72 year, and the Higher Education appropriations bill directed increases in all medical schools.

MSMS provided information upon which the Legislature enacted protection from subpoena for physicians serving on hospital review committees. Another medically important measure requires physicians who diagnose lead poisoning in patients to report same to the County or State Health Department.

A major effort to develop acceptable malpractice legislation saw the appointment and start of work of a Special Joint Legislative Committee on Medical and Hospital Malpractice. The committee in turn established its own citizen advisory committee, on which MSMS has two members. No effort was made to develop bills for introduction in 1972, but the committee expects to report to the full Legislature with recommendations in 1973.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Precautions: Administer with caution to patients with incipient glaucoma, bladder neck obstruction or urinary bladder atony. Prolonged use of barbiturates may be habit-forming.
Side effects: Blurred vision, dry mouth, dysuria, and other atropine-like side effects may occur at high doses, but are only rarely noted at recommended dosages.
Dosage: *Adults:* One or two tablets three or four times daily. Dosage can be adjusted depending on diagnosis and severity of symptoms.

Children 2 to 12 years: One-half or one tablet three or four times daily. Tablets may be chewed or swallowed with liquids.

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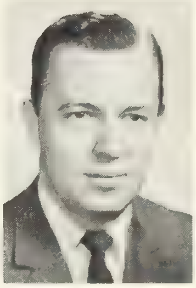
Your opinion please

MSMS asked the question:

"The question of unionizing is much in the minds of Michigan physicians these days. How do you feel about physicians' unions? Why? If you are in favor, what form would you have the unions take?"

These doctors replied:


Doctor Drew

Doctor Grigg

Dale R. Drew, MD
Bloomfield Hills

The proposal has been advanced, by some physicians, that unionization for the purpose of collective bargaining be undertaken at once by all physicians.

I strongly reject this proposed action for the following reasons:

The formation of a union for the purpose of bargaining collectively for fees carries with it the implied threat of withholding our services if fee demands are not met. Let us remember that a strike, just as a weapon, should never be brandished unless it is intended to be used.

The formation of a union would place the authority to arbitrarily assign a monetary value to my professional services in the hands of a few officials, with whom I may strongly disagree, and who then could order me to withhold treatment from my patients if these demands were not met.

Personally, I cannot conceive of voluntarily giving away the right to determine the worth of my own services, or the right to attend my patients when they are in need.

If the citizens of this land wish to enact legislation which takes those rights away from me, then I can do nothing, either individually or collectively, to prevent it except to test the constitutionality of such legislation in court.

It seems to me that the best way to provoke the people to such a vindictive course of action would be to debase the professional dignity of the physician by resorting to such a mean and callous act as a medical strike.

John W. Grigg, MD
Bay City

During the past year, an increasing number of physicians have expressed dissatisfaction with organized medicine. Many have advocated unionization, and thus a break with traditional organized medicine. An affiliation with one of the national labor organizations or unions has been advocated. There are presently several instances in California, and one in Nevada where physicians have affiliated with labor union organizations.

There is a common belief that a union would be in a better position to "negotiate" with governmental bodies to insure a "workable program" should further health care legislation be enacted. There is especially concern in the method of reimbursement for services. It is not so much the amount of the fee but the method of reimbursement or the abolishment of the fee for services, and a change to a capitation method of payment.

I believe what my dissident colleagues are in actuality voicing is a belief that organized medicine has been unable to agree, and purposefully advance a realistic, positive, program for changes in the delivery of health care on a nationwide basis, and subsequently to effectively advocate this program to the legislative bodies. Our stance long has been defensive and not offensive. Further, I interpret the cry to unionization as my colleagues belief that organized medicine will be unable to change direction and adequately protect their interests. In my opinion, they incorrectly assume unionization will solve the problem, maintain the status quo, and magically make all of those bad monsters of social change disappear.

Aside from the seemingly explicit statutes prohibiting the self-employed from collective bargaining under the Sherman Anti-Trust Act (at least as interpreted by attorneys from the AMA and the Michigan State Medical Society), there are other and more compelling moral considerations for physicians to contemplate. I would assume most of my medical colleagues have never been "privileged" to carry a lunch bucket, wear a union button, or observe the "democratic process" of taking a strike vote among the union membership. We are accustomed to open forum discussion in our medical meetings which sometimes are noisy, rarely ungentlemanly, but never, never, my friends, a fist in the face, a physical beating, or even a broken arm. Blind, newspaper columnist Victor Reisel was a testimonial that union methods could be even more severe. There is little room for dissent on the part of the membership. Issues are mainly decided by the union leadership. We in the Medical Profession not only tolerate, but thrive on dissent. This has been part of the essence of our scientific achievements.

As a group of temperamental, individualistic professionals, I wonder if we are willing to sacrifice our independence to unionization. I am cognizant that other professionals have organized for the purposes of leverage to better control their collective destinies. This has not apparently changed their professional competence.

Our professional status is highly regarded by the public (in spite of occasional adverse commentary). Our independence to make decisions is respected. This is one of the reasons I like my chosen profession and would not care to sacrifice my prerogatives of independent thought whether it be from the government on one hand or a labor union on the other.

The medical profession must seriously consider whether it wishes to sacrifice individualism for so-called bargaining leverage. We must consider if we are prepared for a broken arm.

(This article first appeared in the August issue of the Bay-Arenac-Iosco Counties Medical Society *Bulletin*. Doctor Grigg is president of the BAICMS.)

George T. Kelleher, MD
Battle Creek

Exordium:

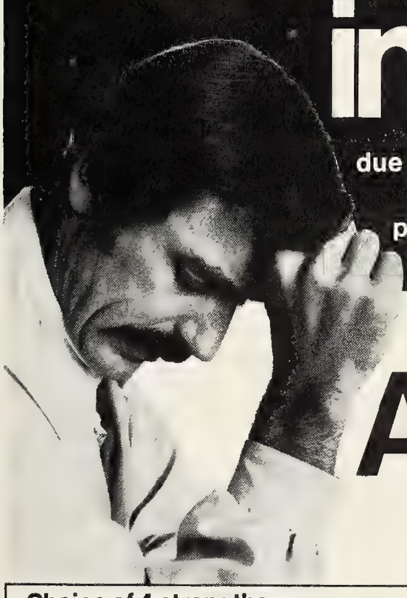
A union is a *legal* entity designed to deal with an employer on the behalf of the employer's employees. The union is the sole agent with whom the employer deals—the employer and employee do not have access to one another. The employee is bound by the arrangements the union makes with the employer. Wagner Act.

In the absence of either employer or employee a union cannot exist.

This discussion concerns itself only with private fee-for-work physicians, whose employer is each patient who seeks his advice and/or care.

From *Medical Economics*, September 25, 1972: "French physicians negotiating with the national health insurance plan did save fee-for-service medicine—but the price was a single, rigid fee schedule for the whole country. Participating MDs lose tax deductions and retirement benefits if expelled for fee violations. And patients of an MD outside the plan collect only about a quarter as much as those whose doctor is in it."

Interference in any proper transaction between two individuals by any third person or agency is improper not only because it is a trespass upon



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T. Jakobovits
Fertility and Sterility, January 1970
Official Journal of the
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Glutamic Acid ....50 mg.	Glutamic Acid ....50 mg.	Glutamic Acid ....50 mg.	Ascorbic Acid (Vit. C) .250 mg.
Thiamine HCL ....10 mg.	Thiamine HCL ....10 mg.	Thiamine HCL ....10 mg.	Thiamine HCL ....25 mg.
Dose: 1 tablet 3 times daily.	*Dose:* 1 tablet 3 times daily.	*Dose:* 1 or 2 tablets daily.	Glutamic Acid ....100 mg.
Available:	*Available:*	*Available:*	Pyridoxine HCL ....5 mg.
Bottles of 100, 500, 1000.	Bottles of 100, 500, 1000.	Bottles of 60, 500.	Niacinamide ....75 mg.
REFER TO PDR			Calcium Pantothenate .10 mg.
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Contraindications: Android is contraindicated in patients with prostatic carcinoma, severe cardiorenal disease and severe persistent hypercalcemia, coronary heart disease and hyperthyroidism. Occasional cases of jaundice with plugging biliary canaliculi have occurred with average doses of Methyl Testosterone. Thyroid is not to be used in heart disease and hypertension.

Warnings: Large dosages may cause anorexia, nausea, vomiting abdominal pain, diarrhea, headache, dizziness, lethargy, paresthesia, skin eruptions, loss of libido in males, dysuria, edema, congestive heart failure and mammary carcinoma in males.

Precautions: If hypothyroidism is accompanied by adrenal insufficiency the latter must be corrected prior to and during thyroid administration.

Adverse Reactions: Since Androgens, in general, tend to promote retention of sodium and water, patients receiving Methyl Testosterone, in particular elderly patients, should be observed for edema.

Hypercalcemia may occur, particularly in immobilized patients: use of Testosterone should be discontinued as soon as hypercalcemia is detected.

References: 1. Montesano, P., and Evangelista, I. Methyltestosterone-thyroid treatment of sexual impotence. Clin Med 12:69, 1966. **2. Dublin, M. F.** Treatment of impotence with methyltestosterone-thyroid compound. West Med 5:67, 1964. **3. Titeff, A. S.** Methyltestosterone-thyroid in treating impotence. Gen Prac 25:6, 1962. **4. Hellman, L., Bradlow, H. L., Zumoff, B., Fukushima, D. K., and Gallagher, T. F.** Thyroid-androgen interrelations and the hypocholesteremic effect of androsterone. J Clin Endocr 19:936, 1959. **5. Farris, E. J., and Colton, S. W.** Effects of L-thyroxine and liothyronine on spermatogenesis. J Urol 79:863, 1958. **6. Osol, A., and Farrar, G. E.** United States Dispensatory (ed. 25). Lippincott, Philadelphia, 1955, p. 1432. **7. Wershub, L. P.** Sexual Impotence in the Male. Thomas, Springfield, Ill., 1959, pp. 79-99.

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Doctor Kelleher

Doctor Van Duyne

individual freedom of action, but, also because such transgression leads to direction of the transaction by the third party. In considering third party as relates to the medical profession and doctor-patient relationship, it is readily apparent that such intrusions, in transferring authority from doctor and patient, lead to control not only of the economic aspects of the relationship, but, inevitably to control of the professional situation. This control would (and has where practiced) lead to direction of the professional relationship, influence of the physician's judgments and treatments, direction of patients to physicians and physicians to patients and other forms of control of this formerly free relationship. The result, as has been seen elsewhere, is to convert the physician to a tradesman or technician, and less efficient and pleasing patient care.

He who controls the purse controls the action.

Should some fee-for-work physicians declare themselves a union, expect:

1. An employer to present itself to the union to provide these physicians and their union a legal environment. There should be little delay in employer(s) appearance; early entrants will be governments at various levels and the various insuring third parties (which will make the union Party 3B).

2. The union, while representing the physician members, will also—and primarily—be representing the union.

3. The union and the employer(s) will be more interested in the union and the employer(s) than in the physician-employees.

4. None of this will contribute to patient care or well-being since with the control of the purse by employer(s) and union will go the control of patient care.

The insertion of Party 3B would simply add to the assault on the physician-patient relationship which exists between physicians and patients who desire this arrangement.

To gain the ends of those who wish to avoid coercion—economically and professionally—one of the important things to avoid is the establishment of unionism by this class of physicians; the result would be the opposite of that desired.

A course of action is open to these physicians and their supporters which does not involve coercion, which is not in "restraint of trade" and which does not interfere with voluntary association between physicians and patient. Organized Medicine is the vehicle by which this goal is attainable. The mechanics is education of physicians and public, i.e., the elucidation of the defects and the ramifications of the defects which have appeared when these arrangements have been employed. While this procedure has been attempted in the past but without evidence of success, the effort should not be abandoned, but rather, intensified, and without resort to compromise.

The end of medicine is good patient care.

Frederick Van Duyne, MD
Flint

I do not support the idea of a doctor's union. The doctor-patient relationship is too precious and sensitive to be subjected to the manipulations of a professional union. We have seen the loss of pride and professional dignity of teachers and nurses who have allowed professional union people to bargain for them. The delivery of health care is becoming increasingly dominated and controlled by government hospitals and other forces outside of our profession. To prevent these influences from forcing a health delivery system upon us that is unworkable, we must be prepared to present a strong and united front. Only then can we negotiate suitable solutions to problems involving fees, regulations, "Provider Agreements," etc.

To accomplish this in Genesee County we have chosen to form a Medical Corporation. Presently we have 281 M.D. and D.O. physician members.

The first problem we are facing is that of Medicaid. About 85% of our members have not signed the Provider Agreement. We do not intend to until the Michigan State Medical Society or our Corporation negotiates a fair and reasonable agreement with the Department of Social Service.

We have also entered into discussions with our local Model Cities, with U.A.W. local unions, hospitals and others to inform them of our intention to provide direction and leadership in all aspects of medical care.

Through total Peer Review we will strive to provide quality care at a reasonable cost to all of our citizens, primarily through the private physician's office. We hope eventually to eliminate waste and duplication of effort through computerized medical records, medical billings and banking of histories and physicals. We plan to benefit the doctor economically by profit-sharing and pension plans, group insurance, volume buying and in the maintenance of reasonable group fees for service commensurate with the cost of doing business and other factors.

With this kind of unity and strength it will be difficult for any third party to influence the delivery of medical care without our input and cooperation.

It is our hope that other county medical societies will organize in a comparable way. Only with such "grass roots" unity and with the guidance and cooperation of the Michigan State Medical Society will the doctor earn and maintain his proper role as leader of the health team.

When and if abortion law reform comes to Michigan, the Michigan Department of Public Health will be ready to regulate the facilities which will perform the newly-legal abortions. They will base their regulations on the recommendations of a special committee, whose thoughts, in part, are explained below.

What will abortion regulations be if law is reformed? —here are clues

By Johan W. Eliot, MD, MPH
Ann Arbor

In April, 1971, the Michigan Department of Public Health co-sponsored and partially supported a conference on Abortion Facilities in Michigan arranged by the Department of Population Planning of the University of Michigan, School of Public Health, and co-sponsored by the Michigan State Medical Society and five other Michigan professional and government organizations.

Acting on recommendations of this conference, the Michigan Department of Public Health convened an Advisory Committee (hereafter referred to as the Committee) which met repeatedly and completed recommendations to the MDPH in March, 1972, entitled "Minimal Criteria and Guidelines for Hospital, Hospital Satellite and Freestanding Facilities Providing Legalized Pregnancy Termination Services." The following organizations were represented on the Committee:

Greater Detroit Area Hospital Council, Inc.
Michigan Association of Osteopathic Physicians and Surgeons, Inc.
Michigan Clergy Counseling Service for Problem Pregnancy
Michigan Council for the Study of Abortion
Michigan Hospital Association
Michigan Hospital Service
Michigan Nurses Association
Michigan Osteopathic Hospital Association
Michigan State Medical Society
School of Public Health, University of Michigan

Since the abortion law referendum on the November ballot was judged to have a distinct chance of passage, the MDPH prepared a set of standards suitable for emergency promulgation in the event the referendum passed based on the committee report mentioned above. This commentary will cover several parts of the committee report and the thinking behind them, judged of special interest to the medical profession and the public. Space does not permit comment on many other parts. This is not a commentary on the official standards of the MDPH for pregnancy termination facilities, since these were not finalized at the time of this writing, but it will provide pertinent background for understanding them when promulgated.

The following remarks concern selected recommendations that are of interest, as the medical profession views with concern the possibility of establishment of abortion facilities of doubtful quality and profiteering motives.

The Committee stated that, "Licensed termination facilities shall be planned, equipped, staffed and operated with the individual patient's welfare and safety to be of paramount concern at all times."

The Committee further specified that: "No staff physician, nurse, or other employee shall ever be required to participate in any phase of a termination procedure against [his/her] will."

1. Licensure

The Committee recommended that non-hospital facilities be relicensed yearly with at least yearly inspection by MDPH staff, more often as necessary. The Director of the MDPH may issue a provisional license to be renewed for no more than two years where there are minor deficiencies in the physical plant that do not impair functioning, provided plans for correction are submitted and satisfactory progress is being made toward compliance. Where minor deficiencies not involving physical plant or professional personnel are involved, a temporary operating permit may be issued, not to exceed six months. Here the Committee's intention was to strike a balance optimal for the health and welfare of Michigan women, who will need safe and economical medical facilities for pregnancy termination as soon as possible after liberalization of the abortion law. Flexibility will be needed at the outset in order to avoid the greater danger to women that arises from lack of access to any medical facility with good standards.

2. Management and profits

The Committee indicated that ownership of an abortion facility may be by a hospital, private or public agency, non-profit organization, corporation,

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Doctor Eliot is associate professor of population planning, University of Michigan School of Public Health.

individual or group of individuals. The last *seems* to open the door to profiteering groups, but the Committee went on to say:

> "In their relationships with referral agencies, termination services shall avoid any semblance of and actively discourage financial exploitation of patients." Furthermore:
>
> "Arrangements should be available for the provision of financial assistance for those in need of such help." And:
>
> "It is recommended that all facilities provide reasonable amounts of services on a reduced rate basis for individuals not eligible for public assistance but unable to pay a full established charge—on a rate scaled to their ability to pay."

3. Counseling and emotional support for patients

The Committee started with the following general provision:

> "The reception of applicants, their admission interviewing, history taking, examination, procedure performance, termination performance, and subsequent care shall be conducted in a considerate and understanding atmosphere which protects the dignity, privacy and emotional concerns of the patient."

The Committee elaborated upon this concern as follows:

> "It is not possible to define in a measurable way the many intangible factors needed in the facility personnel—understanding, sympathetic and compassionate attitudes of all those involved with the reception, counseling, termination procedure and pre- and post-operative emotional support of patients when needed. These important elements in a termination service cannot be overemphasized. The physician performing the service should set the pattern by his own attitude and conduct in dealing with patients. Nurses, counselors, social workers and any others directly involved in any phase of patient care should exemplify the same attitudes. Punitive, hostile or critical attitudes toward those seeking assistance or undergoing a termination procedure should not be allowed. Information, counseling advice and referral assistance to any other indicated community agency or service should be provided in an open, friendly manner in an effort to help the patient to make the best possible decision on whether to undergo a termination procedure or continue with the pregnancy. Under no circumstances should coercive efforts be used, or the patient be persuaded or unduly influenced to undergo or not to undergo a termination and/or sterilization procedure."

The last sentence refers specifically to the practice all too prevalent in American hospitals of requiring an applicant for a therapeutic abortion to submit to

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sterilization at the same time, as a condition for performance of the abortion.

Regarding counseling of individual patients, the committee specified:

> "Counseling shall be an integral part of termination services and shall be available, without coercion, to any woman considering termination of pregnancy. Counseling should be available:
>
> (1) "When a woman is deciding whether or not to terminate the pregnancy."
>
> (2) In the preparation for the termination, and as support during and after the procedure.
>
> (3) "For discussion of contraception.

Clearly, the Committee is specifying the need for individual counseling before, during and after the procedure. Group counseling can be a useful supplement to, but not a substitute for individual counseling.

4. Qualifications of physicians and nurses

Each facility is to have a medical director; it also must have an administrator, who may or may not be the medical director. The qualifications of this and other physicians doing pregnancy terminations were specified in functional terms: They must have a special interest in and be qualified by training and experience in pregnancy termination and the detection and handling of related complications and emergencies. The medical director must be able to assure that policies and procedures are complied with and that competent care is provided to each patient. Physicians may arrive at expertise through qynecologic or surgery specialty board certification, by training qualifying them to take the board examinations, by individual preceptorship under a board certified specialist, or by long practice and experience: one of these sources of expertise must be clearly demonstrated. It is likely that major medical centers will establish specific intensive training courses that can qualify physicians under the third of these criteria. The Committee discussed requirement of board certification or eligibility for all medical directors, but felt this could work a hardship on small communities where experienced physicians without these qualifications have provided competent gynecologic and surgical care and will need to provide pregnancy terminations.

Nursing skills are similarly functionally defined. While nurses with obstetric training are welcomed, they are *not* required. The Committee recognized that there are mental and emotional problems generated when nurses trained for and oriented toward obstetric delivery and management of liveborn infants are required to deal with patients terminating

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a pregnancy, particularly one between 12 and 20 weeks of gestation. The important thing is special training and/or experience in pregnancy termination, and a willingness to serve in such facilities.

Medical consultation in regard to a variety of possible complications must be available, but is not required, nor is any board or committee approval recommended. The Committee was aware of and wished to avoid the extra expense and delay of procedures inherent in mandatory psychiatric or other consultations required in some states.

5. Procedures to be used in freestanding facilities

After much discussion regarding safeguards needed if inhalation or intravenous anesthesia is used, the Committee flatly recommended that only local anesthesia be used in facilities not within a hospital; any condition (including excessive anxiety of the patient) requiring general anesthesia is an indication for referring the patient into a hospital. The above limitation automatically affects two other aspects of care: It means that the suction technique will be the one used most since it requires little or no dilatation for early pregnancies and can best be accomplished without general anesthesia. It also makes possible the use of slightly smaller procedure rooms, since equipment for general anesthesia will not be there, only an emergency oxygen tank and mask.

Only uncomplicated pregnancies of 12 weeks or less duration since start of the last menstrual period may be terminated in non-hospital facilities. Other pregnancies must be terminated in hospitals. The physician must admit the patient to the hospital if the uterus seems larger than a 12 week pregnancy, regardless of last menstrual date.

The Committee recommended that freestanding facilities develop medical review committees and procedures customary in hospitals, such as a medical audit and/or utilization, medical records, and tissue committees, suitable to the director of the MDPH. The Committee felt that such facilities must develop written standards regarding qualifications of medical and other personnel, admission standards and operational policies to be submitted with application for licensure, for approval before implementation. Changes must also be approved by the MDPH.

The Committee recommended only a minimum of required laboratory procedures for non-hospital facilities, to be done in a laboratory approved by the Director of MDPH, which should be readily accessible to the facility.

(Doctor Eliot's paper contained many more details of the legal abortion procedure recommendations. They had to be deleted because of space limitations, but may be obtained from him, or the director, Michigan Department of Public Health.)

MICHIGAN
DEPARTMENT
OF PUBLIC
HEALTH

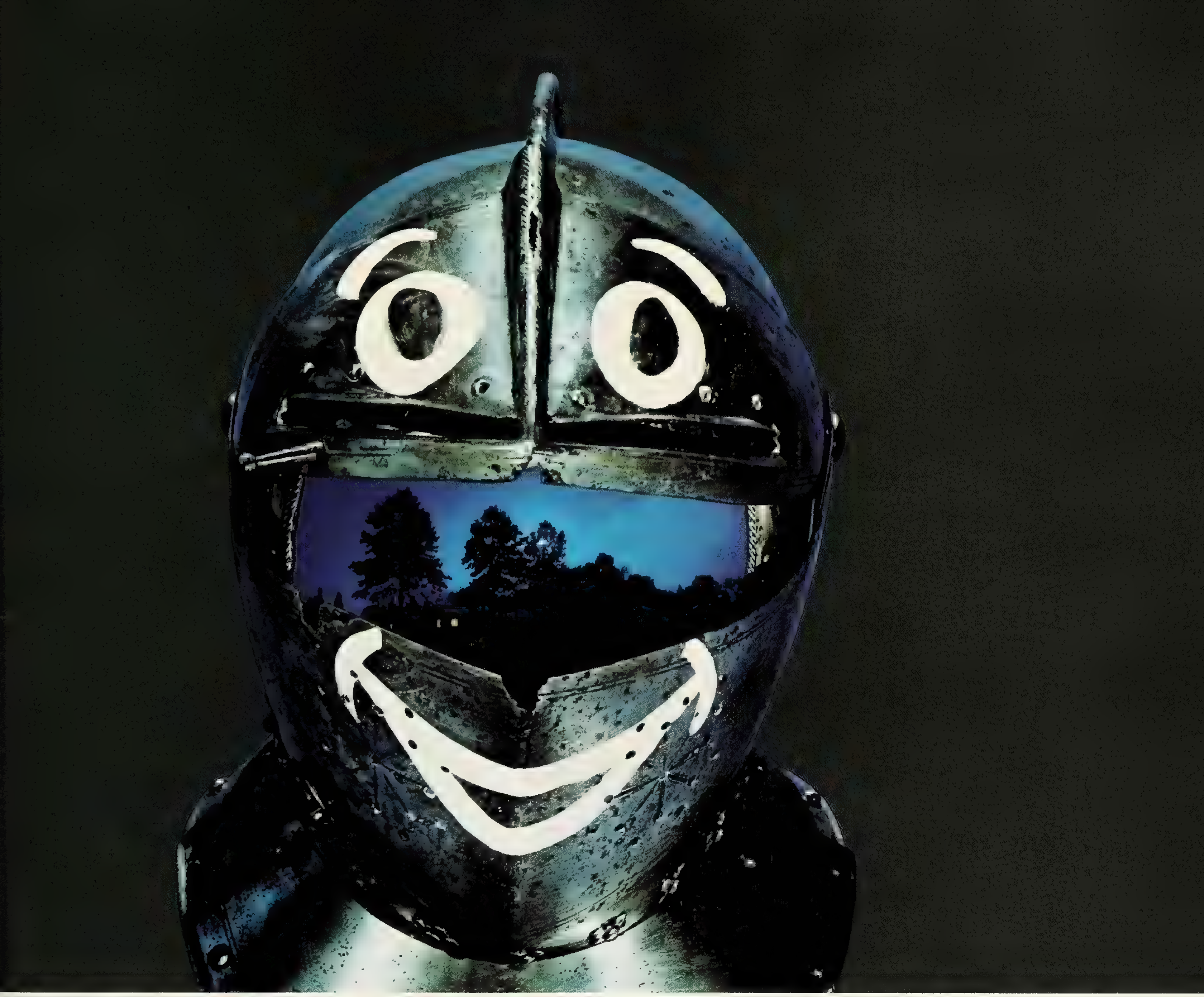
Monthly Surveillance Report

Cases of Certain Diseases Reported
To the Michigan Department of Public Health
For the Four-Week Period Ending Sept. 29, 1972

	1972 This 4-Week Period	1971 Same 4-Week Period	1972 Total To Above Date	1971 Total Same Date	Total Cases for 1971
Rubella	17	62	1,280	2,679	2,955
Congenital Rubella Syndrome	0	0	0	1	1
Measles	17	66	1,993	2,345	2,659
Whooping Cough	6	11	81	102	140
Diphtheria	0	0	1	0	1
Mumps	47	126	2,740	9,572	10,748
Scarlet Fever & Strep Sore Throat	453	333	8,517	8,480	11,244
Tetanus	0	0	1	2	7
Poliomyelitis (paralytic)	0	0	0	0	0
Hepatitis	335	337	3,223	3,683	4,828
Salmonellosis (other than S. typhi)	70	74	618	528	691
Typhoid Fever (S. typhi)	0	2	6	6	10
Shigellosis	51	27	443	159	295
Aseptic Meningitis	50	33	151	146	239
Encephalitis	8	8	72	91	108
Meningococcic Meningitis	1	2	40	54	64
H. Influenza Meningitis	4	1	59	62	82
Tuberculosis	81	177	1,276	1,417	1,824
Syphilis	271	329	3,627	3,258	4,689
Gonorrhea	2,118	1,750	17,834	15,869	22,115

Information can be supplied by the local health department on the local incidence of disease.

Maurice Reizen, M.D., Director
Michigan Department of Public Health



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For upper respiratory allergies and infections including the common cold, Dimetapp Extentabs® effectively relieve the stuffiness, drip and congestion all night and all day long on just one Extentab every 12 hours. For most patients drowsiness or overstimulation is unlikely.

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Dimetane® (brompheniramine maleate), 12 mg.; phenylephrine HCl, 15 mg.; phenylpropanolamine HCl, 15 mg

INDICATIONS: Dimetapp Extentabs are indicated for symptomatic relief of allergic manifestations of upper respiratory illnesses, such as the common cold, seasonal allergies, sinusitis, rhinitis, conjunctivitis and otitis. In these cases it quickly reduces inflammatory edema, nasal congestion and excessive upper respiratory secretions, thereby affording relief from nasal stuffiness and postnasal drip.

CONTRAINDICATIONS: Hypersensitivity to antihistamines of the same chemical class. Dimetapp Extentabs are contraindicated during pregnancy and in children under 12 years of age. Because of its drying and thickening effect on the lower respiratory secretions, Dimetapp is not recommended in the treatment of bronchial asthma. Also, Dimetapp Extentabs are contraindicated in concurrent MAO inhibitor therapy.

WARNINGS: *Use in children:* In infants and children particularly, antihistamines in overdosage may produce convulsions and death.

PRECAUTIONS: Administer with care to patients with cardiac or peripheral vascular diseases or hypertension. Until the patient's response has been determined, he should be cautioned against engaging in operations requiring alertness such as driving an automobile, operating machinery, etc. Patients receiving antihistamines should be warned against possible additive effects with CNS depressants such as alcohol, hypnotics, sedatives, tranquilizers, etc.

ADVERSE REACTIONS: Adverse reactions to Dimetapp Extentabs may include hypersensitivity reactions such as rash, urticaria, leukopenia, agranulocytosis and thrombocytopenia; drowsiness, lassitude, giddiness, dryness of the mucous membranes, tightness of the chest, thickening of bronchial secretions, urinary frequency and dysuria, palpitation, hypotension/hypertension, headache, faintness, dizziness, tinnitus, incoordination, visual disturbances, mydriasis, CNS-depressant and (less often) stimulant effect, anorexia, nausea, vomiting, diarrhea, constipation, and epigastric distress.

HOW SUPPLIED: Light blue Extentabs in bottles of 100 and 500.

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Ⓒ III Phenaphen with Codeine is now classified in Schedule III, Controlled Substances Act of 1970. Available on written or oral prescription and may be refilled 5 times within 6 months, unless restricted by state law.

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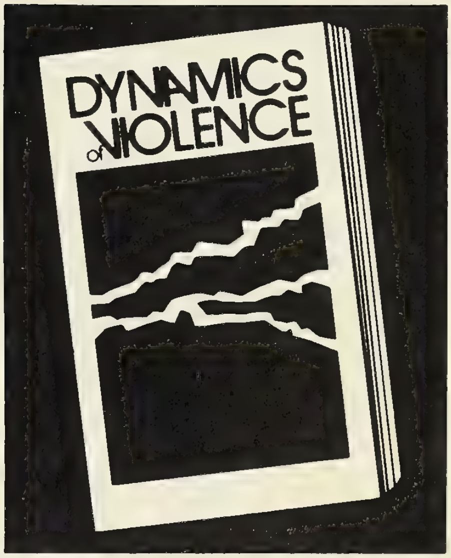

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SMJ 11/72

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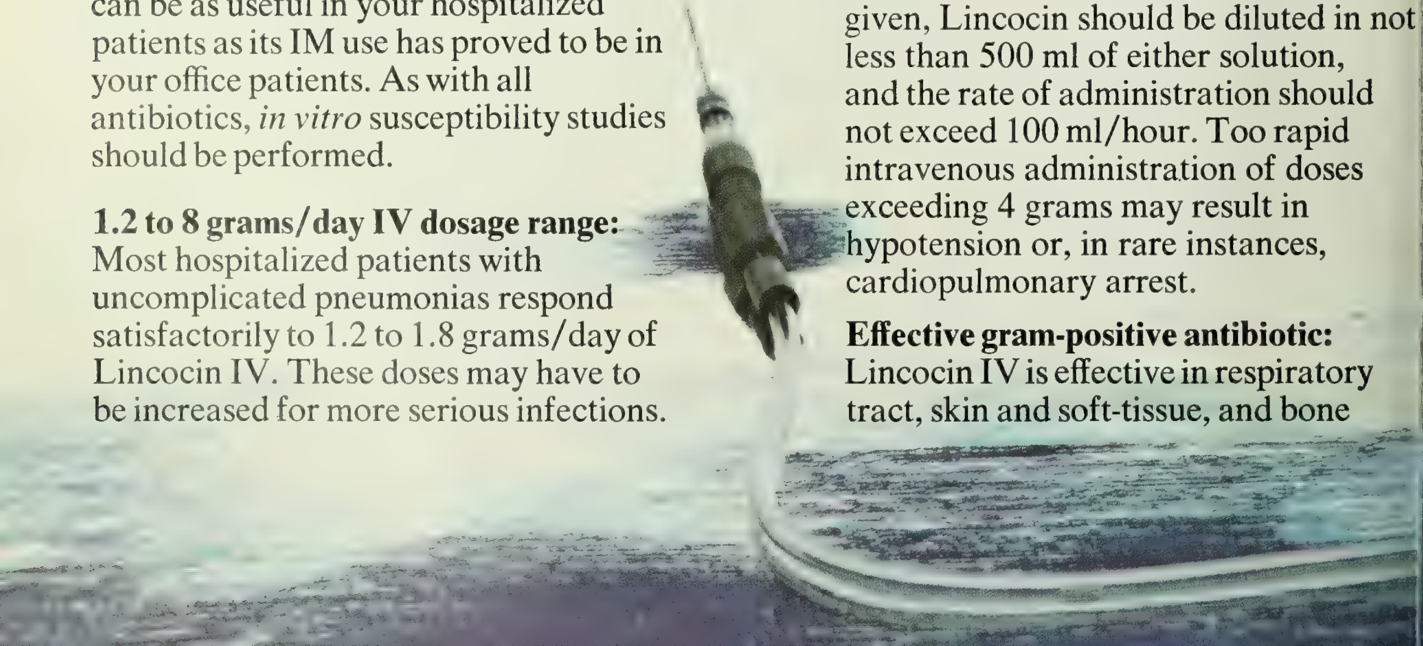
1.2 to 8 grams/day IV dosage range: Most hospitalized patients with uncomplicated pneumonias respond satisfactorily to 1.2 to 1.8 grams/day of Lincocin IV. These doses may have to be increased for more serious infections. In life-threatening situations as much as 8 grams/day has been administered intravenously to adults.

In usual IV doses, Lincocin (lincomycin hydrochloride, Upjohn) should be diluted in 250 ml or more of normal saline solution or 5% glucose in water. But when 4 grams or more per day is given, Lincocin should be diluted in not less than 500 ml of either solution, and the rate of administration should not exceed 100 ml/hour. Too rapid intravenous administration of doses exceeding 4 grams may result in hypotension or, in rare instances, cardiopulmonary arrest.

Effective gram-positive antibiotic: Lincocin IV is effective in respiratory tract, skin and soft-tissue, and bone



infections caused by susceptible strains of pneumococci, streptococci, and staphylococci, including penicillin-resistant strains. Staphylococcal strains resistant to Lincocin (lincomycin hydrochloride, Upjohn) have been recovered. Before initiating therapy, culture and susceptibility studies should be performed. Lincocin has proved valuable in treating patients hypersensitive to penicillin or cephalosporins, since Lincocin does not share antigenicity with these compounds. However, hypersensitivity reactions have been reported, some of these in patients known to be sensitive to penicillin.

Well tolerated at infusion site: Lincocin ntravenous infusions have not produced local irritation or phlebitis, when given as recommended. Lincocin s usually well tolerated in patients who re hypersensitive to other drugs. Nevertheless, Lincocin should be used autiously in patients with asthma or ignificant allergies.

n patients with impaired renal function, he recommended dose of Lincocin hould be reduced to 25–30% of he dose for patients with normal idney function. Its safety in regnant patients and in infants ss than one month of age has ot been established.

incocin may be used with other ntimicrobial agents: Since Lincocin stable over a wide pH range, it is itable for incorporation in travenous infusions; it also may be administered concomitantly with other antimicrobial agents when indicated. However, Lincocin should not be used with erythromycin, as *in vitro* antagonism has been reported.

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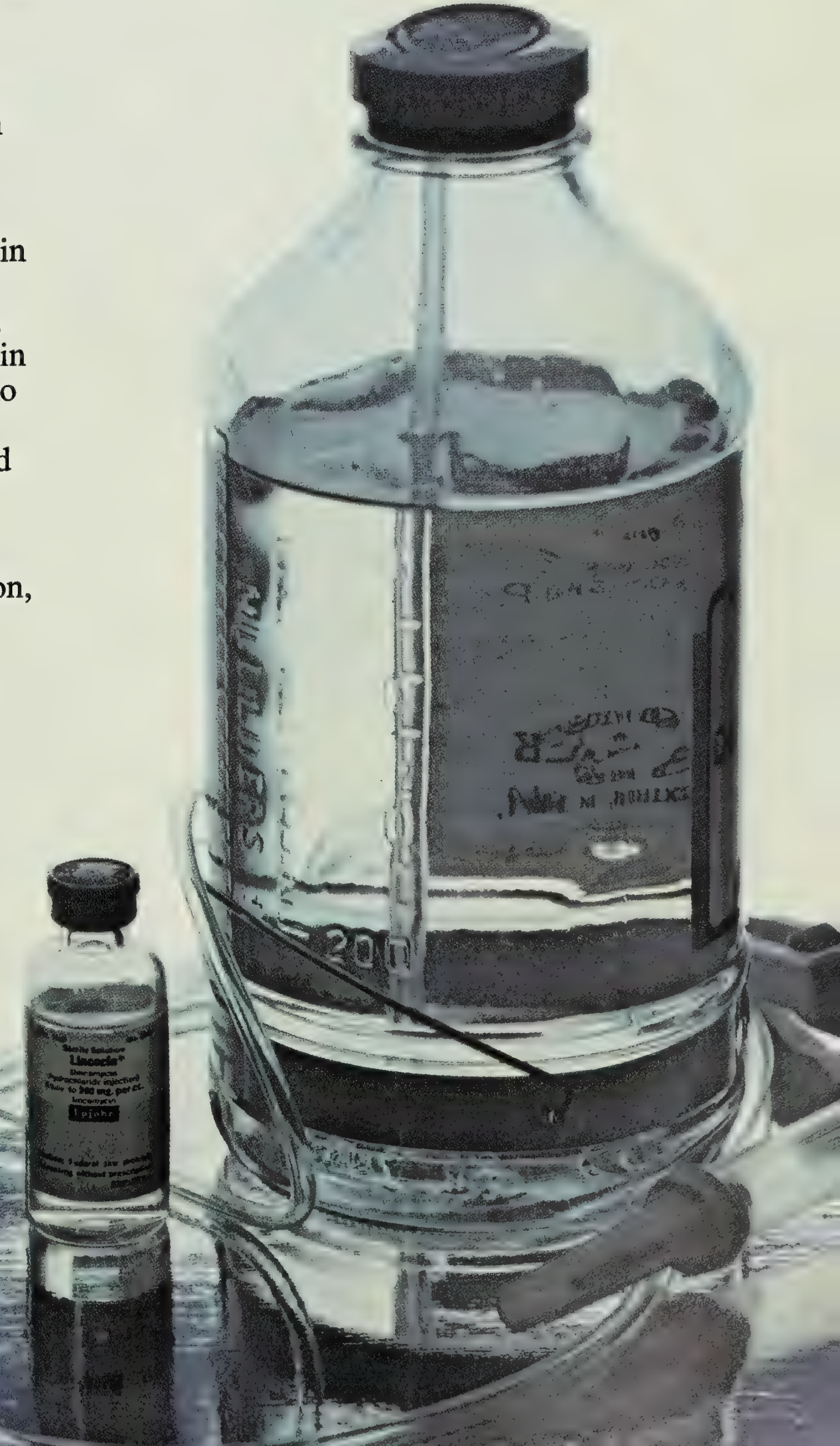
Sterile Solution (300 mg per ml)

(lincomycin hydrochloride, Upjohn)

For further prescribing information, please see following page.



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Sterile Solution (300 mg. per ml.)

Lincocin®

(lincomycin hydrochloride, Upjohn)

Up to 8 grams per day by IV infusion for hospitalized patients with life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. As with all antibiotics, *in vitro* susceptibility studies should be performed.

Each preparation contains:	Lincomycin hydrochloride monohydrate equivalent to lincomycin base
250 mg Pediatric Capsule	250 mg
500 mg Capsule	500 mg
*Sterile Solution per 1 ml	300 mg
Syrup per 5 ml	250 mg

*Contains also: Benzyl Alcohol 9 mg; and, Water for Injection—q.s.

Lincocin (lincomycin hydrochloride) is indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed. Cross resistance has not been demonstrated with penicillin, ampicillin, cephalosporins, chloramphenicol or the tetracyclines. Some cross resistance with erythromycin has been reported. Studies indicate that Lincocin does not share antigenicity with penicillin compounds.

CONTRAINDICATIONS: History of prior hypersensitivity to lincomycin or clindamycin. Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: *CASES OF SEVERE AND PERSISTENT DIARRHEA HAVE BEEN REPORTED AND HAVE AT TIMES NECESSITATED DISCONTINUANCE OF THE DRUG. THIS DIARRHEA HAS BEEN OCCASIONALLY ASSOCIATED WITH BLOOD AND MUCUS IN THE STOOLS AND HAS AT TIMES RESULTED IN AN ACUTE COLITIS. THIS SIDE EFFECT USUALLY HAS BEEN ASSOCIATED WITH THE ORAL DOSAGE FORM BUT OCCASIONALLY HAS BEEN REPORTED FOLLOWING PARENTERAL THERAPY.* A careful inquiry should be made concerning previous sensitivities to drugs or other allergens. Safety for use in pregnancy has not been established and Lincocin (lincomycin hydrochloride) is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infections for 10 days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihista-
mines available for emergency treatme
Skin and mucous membranes—Skin rash
urticaria, vaginitis, and rare instances of e
foliative and vesiculobullous dermatitis ha
been reported. *Liver*—Although no direct
lationship to liver dysfunction is establishe
jaundice and abnormal liver function te
(particularly serum transaminase) have be
observed in a few instances. *Cardiovascul*
—Instances of hypotension following pare
teral administration have been reporte
particularly after too rapid IV administ
tion. Rare instances of cardiopulmonary
rest have been reported after too rapid
administration. If 4.0 grams or more adm
istered IV, dilute in 500 ml of fluid a
administer no faster than 100 ml per ho
Special senses—Tinnitus and vertigo ha
been reported occasionally. *Local reactio*
—Excellent local tolerance demonstrated
intramuscularly administered Linco
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following injection have been infreque
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water or normal saline has produced
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Medico·legal

Medical center owner liable for surgeon's negligence

The following medico-legal case is reprinted here at the suggestion of A. Stewart Kerr, MSMS legal counsel. Comments Mr. Kerr: "There is more of this type of relationship than many realize, and I personally know of several comparable set-ups." The case was first printed in the June 15 issue of the AMA *CITATION newsletter.*

A physician who owned a medical center was liable for the alleged malpractice of a surgeon using the services of the center, a Michigan appellate court ruled. Although an independent contractor, the surgeon conducted himself as a member of the center and sent out bills on the center's stationery.

When a 5-year-old girl was injured in an automobile accident, the owner of the medical center examined her and referred her to the surgeon for application of a cast. Her mother took her to the medical center six weeks later for cast removal. The surgeon used a vibrating wheel, which he later testified did not turn but removed a cast by vibration. He also testified that a finger placed directly on the wheel would not be cut.

Shortly after the surgeon began removing the cast the girl started to scream. Although the mother told the surgeon to stop because the girl was being hurt, he insisted she was merely frightened and proceeded to remove the cast. When he was finished, deep bleeding cuts were revealed. The surgeon treated the cuts and told the mother to bring the child back for further treatment if necessary.

Suit was brought against the surgeon and the owner of the medical center. Before trial the suit against the surgeon was dropped under an agreement not to hold the surgeon personally liable for any malpractice. The trial court found that the patient had met the burden of proof as to malpractice against the surgeon and that the owner of the center was liable for the surgeon's acts.

There were 33 physicians associated directly with the center, six of whom maintained offices there. Patients were often billed by the center. The surgeon had an office there and was called on by the center for surgical services. He and other physicians paid the center 50% of their charges in return for use of the facilities.

On appeal, the court said that, although the surgeon was an independent contractor, the owner of the center could incur liability for the surgeon's negligence on the basis that patients could reasonably conclude that he was an agent of the center.

In order to recover damages for alleged acts of an ostensible agent, the person dealing with the agent must reasonably believe in the agent's authority, the court said. Such belief must be generated by an act of the principal who is charged with liability for the agent's acts, and, in relying on the agent's apparent authority, the person dealing with the agent must not be guilty of negligence.

The child had been personally referred to the surgeon by the owner of the center. She was treated entirely at a hospital where the surgeon performed as a member of the center. Further, her treatment was billed through the medical center on center stationery with the surgeon's name on it. The court said that there was no reason for the mother to think that the surgeon was not an employee of the center.

Affirming the judgment of the trial court, the court said that, although the surgeon testified that a finger placed on the wheel would not be cut, the fact that the child was cut when the vibrating wheel was used was sufficient for the trial court to find the surgeon guilty of malpractice.—*Howard v. Park,* 195 N.W.2d 39 (Mich. Ct. of App., Jan. 17, 1972; rehearing denied, March 3, 1972).

The AMA's CITATION newsletter, prepared by the AMA Law Department, lists the following cases involving health personnel in Michigan. Persons interested in obtaining more information on individual cases may write MSMS headquarters.

"Cosmetology not a profession"
Michigan Court of Appeals, Jan. 21, 1972
from the *Citation,* Aug. 1, 1972

"Psychiatrist liable for false
imprisonment in mental hospital"
Michigan Sup. Court, Nov. 9, 1971
from the *Citation,* July 15, 1972

"Reimbursement requirement
for committed patient unconstitutional"
Michigan Sup. Court, July 7, 1971
from the *Citation,* July 15, 1972

"Natural father awarded custody
of illegitimate child"
Michigan Court of Appeals, Oct. 21, 1971
from *The Citation,* Aug. 15, 1971

In memoriam

Howard W. MacFarlane, MD
Detroit

Howard W. MacFarlane, MD, track physician and medical director of the Hazel Park Harness Racing Association since 1953, died Sept. 10 at the age of 75.

Doctor MacFarlane, an otorhinolaryngologist, was a graduate of the Detroit College of Medicine and Surgery. He was affiliated with Children's and Harper hospitals in Detroit.

Doctor MacFarlane was a member of the Academy of Otolaryngology and Ophthalmology, and was past president of the Detroit Otolaryngological Society. He served with the Medical Corps during World War I.

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Paul C. Rohde, MD
Detroit

Paul C. Rohde, MD, Detroit family physician for 50 years, died Sept. 16 at the age of 87.

Doctor Rohde had been on the staff of The Grace Hospital, Detroit and went into semi-retirement in 1967. He was a graduate of the Detroit Homeopathic College of Medicine and served as a captain in the U.S. Army Medical Corps during World War I.

Harry J. Richter, MD
Saginaw

Long-time Saginaw otorhinolaryngologist Harry J. Richter, Sr., MD, died Sept. 6 at the age of 65.

A graduate of the University of Michigan Medical School, Doctor Richter had a private practice in Saginaw since 1945. He served on the U-M faculty from 1932 to 1937 and was active in alumni affairs.

Doctor Richter also practiced at the Lahey Clinic in Boston and served with the U.S. Navy during World War II. His son, Harry J. Richter, Jr., MD, a 1968 graduate of the U-M Medical School, is now a resident physician in University Hospital working under Walter P. Work, MD, colleague of the senior Doctor Richter.

Charles S. Walker, MD
Battle Creek

The first black physician to practice in Battle Creek, Charles Sumner Walker, MD, died Aug. 26 at the age of 73.

A graduate of Howard University medical school, Doctor Walker came to Battle Creek from Washington, DC, in 1928. He was on the staffs of Leila and Community hospitals in Battle Creek, and was a family physician.

Thyroid Workshop scheduled Dec. 6 at WCMS headquarters

The 12th annual Thyroid Workshop sponsored by the Wayne State University School of Medicine is scheduled Dec. 6 at the Wayne County Medical Society Auditorium, 1010 Antietam, Detroit. Guest speakers will be Monte Greer, MD, University of Oregon Medical School, and Joseph Canary, MD, Georgetown University Medical School. Further information may be obtained from Ali A. Abbasi, MD, Wayne State University School of Medicine, 540 E. Canfield Ave., Detroit, 48201.

Zip code 48823

MSMS facts statement merits wide distribution

To the editor:

Michigan Medicine, in the September 1972 issue has printed some very noteworthy statements in the article FACTS ON MEDICAID & MEDICARE prepared by the MSMS Bureau of Economic Information.

Much of the potential impact of such statements is lost in not bringing this before the public. A more eye-catching bulletin of these statements suitable for the doctors' office bulletin board would add strength to our posture against the government control of medicine.

I commend *Michigan Medicine* for this report.

Very sincerely yours,
William J. Fuller, MD
Grand Rapids

Child abuse also a reportable disease

To the editor:

I was most concerned to see that child abuse was not listed in your *complete* list of reported diseases printed in the September 1972 issue of *Michigan Medicine*. Child abuse is one of the most severe and common of all reportable diseases. Each of the six points listed is appropriate for this problem as well as the other diseases in the list. The Michigan law, however, makes it very clear that physicians must report all suspected cases of child abuse.

We must find a way to demonstrate to the MSMS members that child abuse has a very clear-cut etiology, pathogenesis, physical findings, diagnostic criteria and treatment. This, in all sense of the word, is a disease and must be considered as such if we hope to make a significant change in its high morbidity and mortality rate.

I would be grateful if these thoughts were transmitted to the membership in an upcoming issue of *Michigan Medicine*. Thank you for your help.

Very sincerely,
Ray E. Helfer, MD
Associate Professor
Michigan State University

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Dearborn doctor agrees with opinions

To the editor:

I was most interested in your August issue and the column; "Your opinion please." Doctor Hissong's comments I second and couldn't agree with more. In fact her idea of participating in the selection of medical students pleased me greatly.

About six months ago I had an opportunity to talk with two representatives of the (student admissions) committee at the University of Michigan Medical School. Reflecting back on our discussion, the most striking thing that comes to mind is that neither of these gentlemen could have had the experience of first line physicians, that is of knowing what it means to be the first doctor to see a patient. I was impressed that they were capable in their fields and as educators perhaps, but I question their special talents in selecting a good physician beyond that which must be set by policies from above.

Yes, your question was very timely, and I was pleased with the answers because I realized others felt the same as I. *But!* I propose the next issue should ask the same question of the deans, and chairmen of the committees at the three medical schools. Their answers I eagerly await to see in *Michigan Medicine.*

Sincerely,
Theodore G. Todoroff, MD
Dearborn

Annual Session program 'most interesting'

To the editor:

I have received the letter of September 11, 1972 concerning the program, "The Anatomy and Physiology of a Community Hospital Medical Staff" (Tuesday, Oct. 3, during MSMS Annual Session). I believe that this is one of the most interesting programs to be initiated by the Michigan State Medical Society for interns and residents during my brief career as Coordinator of Medical Education.

I have taken the opportunity to announce to all of our interns and residents that they are more than welcome to attend this session if proper arrangements can be made.

Sincerely,
Thomas C. Gentile, Jr.
Administrative Coordinator for
Medical Education
Providence Hospital
Southfield

Manistique physician delighted with SAMA - MECO program and students

To the editor:

During the summer months of 1972, the physicians and medical staff of the Manistique Medical Center had the pleasure of the attendance of Robert Jean and Joseph Oyer, sophomore medical students, from the Michigan State University College of Human Medicine. I would like to take this opportunity to inform you of the superior job that these young men have done on their externship, and we were delighted to have the opportunity to be affiliated with the MSU medical school. We would, very definitely, like to remain on a permanent program and would be willing to accept students, in the future, at your convenience.

In the past, we have accepted students in their junior and senior years, from other universities, and we were somewhat reluctant about the use of freshman and sophomore students. But, much to our amazement, the ability of these young men to apply themselves and adjust to the clinical-medical setting that they were put in, was most impressive, and we are hoping, if at all possible during their following three years of education, that, if either Robert Jean or Joseph Oyer would have an opportunity for another externship, or further clinical education, they return to Manistique, Michigan, for that program.

I would like to mention to you that the program was built around a total package of orientation, and familiarization, with the practice of medicine in a county hospital, in a rural setting and on a clinical level.

During their stay in Manistique, the students were exposed to the same type of orientation and affiliation, with our outpatient clinic, which is a private group of physicians in the Medical Center. They also spent time with the dentists and oral surgeon in the community. They attended all staff meetings, hospital board meetings, review committee meetings, and utilization meetings, and were exposed to the total pattern operation, of both the private office and the county hospital.

Once again, I thank you for the opportunity to have Robert Jean and Joseph Oyer in our community, and we hope that we will continue to be part of your extern program, and if we can be of any further service to you, regarding this matter, or any other matter, please do not hesitate to call upon us.

Sincerely,
L.J. Sell M.D., A.A.G.P.
Chief of Staff
Schoolcraft Memorial Hospital
Manistique

This letter was sent to Dean Andrew D. Hunt, Jr., MD, MSU College of Human Medicine. The students it discusses were placed in their summer externship by MSMS coordinators of the SAMA Medical Education Community Orientation project.

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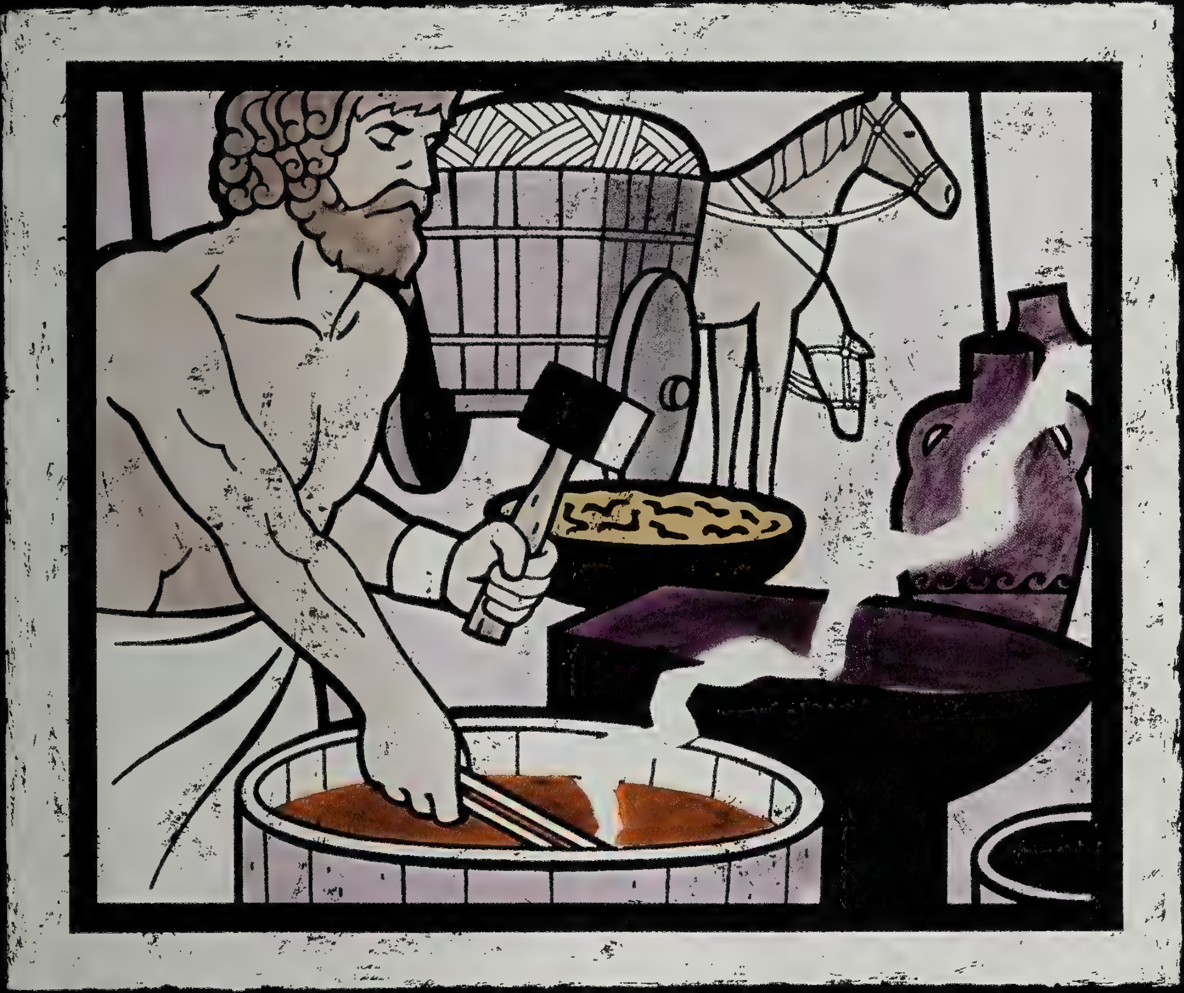

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(See reverse side for prescribing information.)

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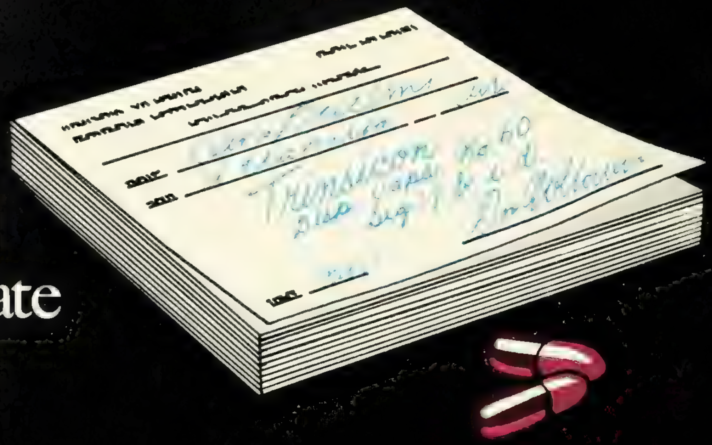

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Folic Acid	0.5 mg.

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Vitamin B_{12} with Intrinsic Factor—When secretion of intrinsic factor in gastric juice is inadequate or absent (e.g., in Addisonian pernicious anemia or after gastrectomy), vitamin B_{12} in physiological doses is absorbed poorly, if at all. The resulting deficiency of vitamin B_{12} leads to the clinical manifestations of pernicious anemia. Similar megaloblastic anemias may develop in fish tapeworm (*Diphyllobothrium latum*) infection or after a surgically created small-bowel blind loop; in these situations, treatment requires freeing the host of the parasites or bacteria which appear to compete for the available vitamin B_{12}. Strict vegetarianism and malabsorption syndromes may also lead to vitamin B_{12} deficiency. In the latter case, parenteral therapy, or oral therapy with so-called massive doses of vitamin B_{12}, may be necessary for adequate treatment of the patient.

Potency of intrinsic factor concentrates is determined physiologically, i.e., by their use in patients with pernicious anemia. The liver-stomach concentrate with intrinsic factor and the vitamin B_{12} contained in two Pulvules Trinsicon provide 1½ times the minimum amount of therapeutic agent which, when given daily in an uncomplicated case of pernicious anemia, will produce a satisfactory reticulocyte response and relief of anemia and symptoms.

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As with all preparations containing intrinsic factor, resistance may develop in some cases of pernicious anemia to the potentiation of absorption of physiological doses of vitamin B_{12}. If resistance occurs, parenteral therapy, or oral therapy with so-called massive doses of vitamin B_{12}, may be necessary for adequate treatment of the patient. No single regimen fits all cases, and the status of the patient observed in follow-up is the final criterion for adequacy of therapy. Periodic clinical and laboratory studies are considered essential and are recommended.

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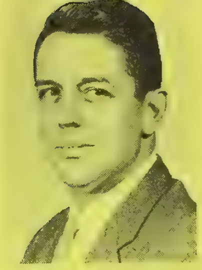
Sound Off

The quality of life

By Tommy N. Evans, MD
Detroit, Michigan

It may be presumptuous to speak of the quality of life when history has demonstrated so many repetitive defects in human existence. History has been described as a blend of art and philosophy. Too much history has been in actual practice a blend of fiction and fact. We can be entirely detached about most history; but when we dig deeper and strike the rock bottom of the story of human activity, it is an altogether different question. There are bound to be spurious versions of history now as there have been in the past because the story itself is never to the liking of everyone. What I am about to present here may be an affront to some. For one reason or another men make their own changes in an old tale as if their telling of it could mold the world. However, now we are faced with facts from which we cannot turn away.

So many of our concerns and many of our mistaken beliefs have been given a validity of sorts because they are widely accepted. So much of our thinking about human existence, and specifically about human reproduction, has been weighted down by the mind-crushing weight of dogma. So many of us have tried to impose on our colleagues as well as on ourselves by almost imperial fiat belief in things that simply are not so. It was not mistaken psychology that prompted the Devil to offer Eve knowledge. His appeal was to mastery, and man must be a master if he is to throw off the yoke of long-treasured and erroneous beliefs relative to an alleged inalienable right to reproduce without restraint. In some cases the world of illusion is not only an ivory tower of strength, it is virtually impregnable.



Doctor Evans

Our thoughts and actions relative to our fantastically growing population have involved us in the depths of thorny intricacies. We are constantly confronted with even grander lies and deceptions. What we believe, what we don't believe, what we do and what we don't do may have very disquieting consequences. All of a sudden physicians have been cast in a terribly important role which may greatly influence the future of our civilization. In recent centuries, natural law has functioned like a mechanical distributor of men. It did its work as inexorably, as perfectly and as justly as a computer. For example, if a man lived on the edge of starvation, there he belonged and presumably should have been happy to find his proper place in our world. Need we add that this doctrine was hardly formulated by the men who were starving? Now our interference with natural law, appropriate or not, has really placed us on the historical brink of disaster.

Anthropologists suggest that there have been 19 and perhaps 20 previous civilizations. In each instance when one would die because of the greed and avarice of those concerned, it was largely a provincial matter. Another civilization arose elsewhere. It is now clear that we have one world and one civilization on the planet Earth. If we destroy this one, it will certainly not be a provincial matter.

We must interfere with the rate of human reproduction, its quality and the distribution of the finite resources in our world. Allan Barnes in a Foreword of a book on human fertility we are editing has indicated that we receive 3.6 billion calories of heat from the sun each day. Otherwise, everything we are ever going to have is here on the planet Earth already. In a finite world infinite population expansion is impossible. Nor is there a just distribution of resources. People in the United States consume over 70 per cent of the manufactured goods of the world.

Of all species of which we have record, 94 per cent are now extinct. Can we continue to assure ourselves that the human species is so different? It may well be that we are already too late to avoid disaster.

It takes a great deal of courage to back truths that have been unacceptable to the precepts to which we were exposed during childhood. The idea that all will work out somehow since everything has worked out satisfactorily in the past is

---

Presented before the California Medical Association, February 14, 1972.

Doctor Evans is chairman, Department of Obstetrics-Gynecology, Wayne State University.

no longer tolerable. That argument is a reciprocating curve that just pushes itself round and round in a circle. It is nothing more than naive conceit that fails to recognize our terrible performance with respect to the quantity and quality of life.

The charts and illustrations demonstrating the exponential growth of our population to fantastic levels are familiar to all. Even though 30 per cent of the children of the world at present go to bed hungry at night, human needs by the end of the next 30 years will outstrip all available resources. This is clearly an accurate picture, but most people don't even like to believe it because of the sheer horror of the arithmetic involved. At the end of the growth curve one sees a formidable total which almost defies belief. One can take the position that this just isn't believable, but any fancies of that sort are just idle. One can contend that later generations will have to handle these problems. Do we really mean that? We are talking about our own children and our own grandchildren.

Figure 1

Current Rate of Population Growth* 1970 (millions)

	Mid 1970	2000 Projection
World	3,632	7,522
Africa	344	860
Asia	2,056	4,513
North America	228	388
Latin America	283	756
Europe	462	571
Oceania	19	33
U.S.S.R.	243	402

*Population Reference Bureau, 1755 Massachusetts Ave., N.W., Washington, D.C. 20036

Figure 2

Countries with Highest Population Growth*

	Country	Growth Rate
1.	Kuwait	8.3
2.	Costa Rica	3.8
3.	Southern Rhodesia	3.4
4.	Iraq	3.4
5.	Philippines	3.4
6-7.	El Salvador and Honduras	3.4
8.	Venezuela	3.4
9-10.	Mexico and Columbia	3.4
11.	Dominican Republic	3.4
12.	Ecuador and Paraguay	3.4

*Population Reference Bureau, 1755 Massachusetts Ave., N.W., Washington, D.C. 20036

Figure 3

Countries with Lowest Population Growth*

	Country	Growth Rate
1.	Malta	- 0.8
2.	East Germany	0.3
3.	Finland	0.4
4.	Austria	0.4
5.	Belgium	0.4
6.	Hungary	0.4
7.	United Kingdom	0.5
8.	West Germany	0.6
9.	Ireland	0.7
10.	Czechoslovakia	0.7

*Population Reference Bureau, 1755 Massachusetts Ave., N.W., Washington, D.C. 20036

Data have been collected to demonstrate the rate of growth in various sections of the world and in specific countries (**Figs. 1, 2, 3**). Although we fare better than many, the one world concept of our civilization makes it impossible for any of us to ignore mass starvation in any area of the world. Have we really done anyone a favor if we help dimish pregnancy wastage and perinatal mortality in individuals destined to starve?

Our efforts to date are discouraging. There is no really satisfactory method for conception control widely applicable to all in need throughout the world. All measures to date including oral contraceptives, mechanical devices such as intrauterine devices and sterilization operations have had little impact on the world population. Intensive search for better methods must continue while we apply more widely, means now at our disposal.

Another factor which has a profound impact on the quality of life is the high incidence of congenital anomalies. Although many genetic, chromosomal and teratogenic causes of congenital defects are recognized, the etiology of the majority is unknown. Prospective studies in some urban areas including our own Metropolitan Detroit suggest an incidence of congenital malformations approaching almost seven per cent. In addition to those with anatomic defects, there are now over six million mentally retarded people in the United States. Most of these tragedies are related directly or indirectly to prenatal events. While searching for other causes and methods of prevention, application of current knowledge lags far behind. Intelligence now seems to be related to the level of maternal amino acids to which the fetus is exposed before birth. Yet within walking distance we apply more widely means now at our disposal. fetal starvation are common.

What can be done about all of this? What is an accurate assessment of what we have and have not done about these most critical concerns about human existence and the quality of life? Obviously, blind faith is not the answer; for faith can be some sort of a super analgesic that can be painlessly swallowed to provide fast relief from the ills of the world. Those of us in a position of influence, and all physicians are in a position of great influence in these areas, must confront the ageless issue of conciliation between reason and feeling. There are many collateral considerations. Every time we think we have reached the Shangri-La with regard to population control, we strike fact instead. All of us concerned with reproductive biology have been caught in a thick web of social obligations and interests, and most have responded with the subtle, soothing sport of rationalization.

Some of us may think that we have really done something major with respect to the quantity and quality of human reproduction, but we haven't even made a dent. Too often we have mistaken fireworks for real artillery.

It isn't easy to face up to all of this. We like to have a few dark corners in which we stow away the unpleasant litter of life. Human existence without a basement or an attic where things can be hidden and forgotten is a fearful thing. To have to stand up in the clear light of our knowledge and face the responsibilities of all of our actions every moment of every day is a bit too much to demand of human courage. Nevertheless in a practical world such as ours, everyone knows that it is not the dreamers who make dreams come true. Process, change, progress, and an immense amount of human activity are man's answer to the fundamental challenge of any desirable goal. We need a lot more than a generous heart if we are to accomplish anything. We just must find more than the perennial vigor of human hope if we are to survive.

It is easier for all of us to confine our thoughts and efforts to our own professional and scientific activity and not concern ourselves with the broader implications of what is happening. If we all bend our efforts, it is unquestionably true that man left to his own devices can gather a tremendous amount of information. The point that is too often overlooked is that man simply cannot wait so long for the advent of wisdom.

The illusion of independence can be bought at much too high a price. There is nothing so completely useless as the illusion that we are self-sufficient, for there is nothing so completely false. No age has had a greater need for ultimate answers, for a plan of action, for an exemplar of human living. No age probably has had less conception of the meaning of life, the things that go into successful living, the manner in which human life must be lived to be successful.

One fact emerges with certainty. There is no way we can escape the responsibilities for what happens to the babies born today.

Doctor Slevin

Let's practice preventive malpractice medicine

By John G. Slevin, MD
Detroit

It can be said, without fear of contradiction, that the malpractice problem is uppermost in the minds of most practicing physicians. The premium rate increase in Michigan has skyrocketed since 1965. In class 5 it has gone from $544 to $2,434 up to January 1, 1971. It would be higher now except for the price freeze. Those in Class 5 are the most vulnerable to malpractice suits. Howeven, even the smallest rate increase among the classes has been 150 percent. No wonder our rank and fil members are asking, "what is organized medicine doing about this problem?"

As one who has been intimately involved in seeking solutions to the malpractice problem for more than 10 years, believe me, it is most frustrating. Your various county and state society committees concerned with it, have been diligent in trying to seek solutions. Since malpractice premium costs, as a medical overhead expense, must be passed on to the ultimate consumer, our patients, the Federal government is now taking a hard look at the problem. In my humble opinion, some form of Federal insurance similar to our Federal Deposit Insurance for bank deposits, may be the ultimate result because most private insurance carriers have stopped writing malpractice coverage. Those remaining in this field will do so only as long as they can charge high premium rates assuring profits.

In the recently conducted MSMS and WCMS malpractice surveys one outstanding objection many respondents raised was to the "contingent fee" concept practiced by the legal profession. Physicians should be realistic and realize there is less chance to delete the contingency fee among lawyers than there is to do away with medicine's "fee for service." Each concept is an entrenched belief in each profession.

Arbitration of malpractice suits and other ploys have been tried in various states with questionable success. Some have advocated that physicians form their own insurance companies. Where it has been tried it has failed. To get down to basics, it should be realized that the vast majority of physicians are paying high malpractice premiums because a very few MDs are being sued two, three or four times for malpractice. Of nearly 8,000 registered MDs in Michigan, the surveys indicated less than 400 had either a malpractice claim or suit filed against them. Only a handful of these went to trial. Most of those tried were won by the physician. When verdicts or settlements were rendered against the MD most were under $10,000 prior to 1971. (Some recent verdicts were much higher, but most were against hospitals and not MDs.)

One thing we in medicine have not adequately considered is what can we do as a profession to control our own members who are malpractice prone. Reports from other areas of the nation indicate that when our profession takes action against the malpractice prone physician, he ceases to be sued. We run into a road block to do this here in Michigan because, generally, we are unable to determine who is malpractice prone. If he is not a member of the medical society we have no jurisdiction over his conduct.

At one time WCMS thought of hiring law students to survey the circuit court files to determine who was being sued for malpractice. This was found to be impractical since cases are not listed in civil suits as malpractice suits.

Insurance carriers were asked if they could furnish such data to the MSMS. We were told by the president of the carrier which insures about 70 percent of Michigan physicians, such information is confidential. The only way, as I see it, that this information could be obtained would be by an act of the legislature requiring insurance carriers to report all malpractice claims to the Insurance Commissioner. He, in turn, could be required to pass this information on to the State Board of Registration in Medicine. The Board would have to be given disciplinary powers as well as investigative authority to act when an MD was found either "at fault," or engaged in "unethical practice of medicine."

If the pending revision of the Medical Practice Act was passed by the Michigan legislature, the Board of Registration would have such disciplinary powers. This, it does not have now. We believe MSMS should push for its passage.

Surveys in Michigan have disclosed a gross failure of the insurance carriers to communicate with physicians. Why, for example, does the carrier decide a claim should be settled rather than go to court. Under present contracts, physicians can veto an out of court settlement. If the carrier would explain why such settlement is advisable, it would lead to better relations. Most physicians think they are innocent of wrong doing, but fail to realize legal problems are not their forte. MDs should be willing to take legal advice just as they expect lawyers to accept medical advice.

Because MSMS does not have a sponsored malpractice program, the individual physician is at the mercy of the insurance carrier. If he is refused coverage, is cancelled for any reason or rates are increased arbitrarily, there is no one to speak up in his behalf. For that reason the MSMS Professional Insurance Committee, on mandate of the MSMS Council, is intensively studying the possibility of a sponsored malpractice insurance program.

Regardless of the outcome of present efforts, it is obvious that the malpractice problem, nationwide, as well as locally, will remain to plague us for some time to come. Therefore, we must do all we can to stave off such suits by a greater awareness among physicians, nurses, residents, and other ancillary personnel of those actions or inactions which initiate suits. Hospital staffs should have at least one yearly session on malpractice.

Since, in the long run, the public pays the bill for increased malpractice premiums, a program of public information should be undertaken. Let the public know there are county medical committees available to hear their complaints re medical care or overcharging. Inform the public that unnecessary lawsuits against physicians add to the overall cost of medical care. Let physicians establish a better rapport with patients. Have factual information pamphlets available in the reception room. Let us practice a little preventive malpractice medicine ourselves.

(This article is reprinted with permission from the Sept. 4 issue of the ***Detroit Medical News.****)*

MSMS must be 'action - oriented'

(Editor's Note: Following are the closing paragraphs of the report by Brooker L. Masters, MD, to the MSMS House of Delegates Oct. 1, 1972 in his last function as chairman of the MSMS Council.)

"My closing comments to you today will focus on our MSMS goals and purposes. Many members have asked me what The Council or MSMS is planning to do about this problem or that issue. I urged The Council to select a small task force of leaders to work with the staff to identify problems, to explore solutions and to develop alternatives that would enable The Council to recommend to the House of Delegates some clear-cut, easily understood objectives for MSMS.

"The House, in its short sessions, really does not have the time to do this. The new Planning and Priorities Committee is considering overall priorities and long-range goals, but doesn't have the capacity to determine short-term objectives.

"Only by identifying short-range and long-range goals can MSMS use the volunteer time of our many members and leaders, and the talents and treasury of MSMS to accomplish visible, impressive results.

"I am sure you concerned, dedicated delegates agree with me that MSMS must be relevant and action-oriented."

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LATE NEWS FROM THE MICHIGAN STATE MEDICAL SOCIETY

Michigan Medicine

November 20, 1972, Volume 71, Number 33
Michigan State Medical Society
Reading Time: 2 min. 30 seconds

LETTER TO THOUSANDS OF DOCTORS WHO HAVE WRITTEN TO MSMS ABOUT MEDICAID PROGRAM AND PROBLEMS . . .

This is the only feasible way to thank each of you for returning the Medicaid questionnaire we sent you and for offering suggestions and comments.

Your suggestions have been tabulated and referred to the MSMS Medicaid Liaison Committee which will meet again soon with the Governor's Liaison Committee.

Answers are being sent to those who asked specific questions about Medicaid.

Replies to the MSMS questionnaire showed that 7 of 10 physicians who care for Medicaid patients had not signed the broad provider agreement or intended to resign as recommended by the House action.

Never before has MSMS been so involved in shaping a program of governmental medical service . . . it has been challenging, frustrating and exciting.

The MSMS Medicaid Liaison Committee at its first meeting decided to divide the issues and deal first with the broad provider agreement as directed by the House. That matter was resolved with the new "Physician Identification Form."

The next session with the Governor's Committee will deal primarily with the identification of matters to be considered especially as they relate to Practitioner Invoice, and the referral of these for exploration and work-up. A third session will be held thereafter to permit attention to unresolved questions such as the definition of an emergency, the clarification of the special status of a newborn infant, etc. The State, too, has indicated it has some issues for discussion and resolution.

Again, let me assure you that the leadership of MSMS and the members of the MSMS Medicaid Liaison Committee (Doctors Fryfogle, Brush, Lahti, Siegel and Toteff) appreciate the effort and time you took to inform us of your thinking about Medicaid. Your continuing support is requested.

-- Robert Leitch, MD, Chairman, The Council

WHAT'S ON YOUR MIND?

MSMS members are urged to tear off the form below, fill it in and mail to MSMS in order to provide input into MSMS plans for some opinion survey work. Plans are underway to use Medigram for the questionnaire in hopes of getting high returns. The MSMS House of Delegates has requested membership surveys on issues facing medicine; and the MSMS Bureau of Economic Information will supervise the project.

I BELIEVE A MSMS MEMBERSHIP OPINION SURVEY SHOULD ASK THESE QUESTIONS:

1.

2.

3.

Return to: Membership Opinion Surveys, MSMS, Box 950, East Lansing 48823

MICHIGAN VOTERS ON NOV. 7 voted against Proposal B, which was supported by MSMS to liberalize abortions. The "no" vote totaled 1,843,863, while the "yes" vote was 1,175,830.

The only physician on the state-wide ballot was successful. Jack Stack, MD, Alma, received 1,331,006 votes on the Republican ticket for one of the open seats on the Board of Trustees of Michigan State University.

MSMS is seeking information about physicians elected to various county positions and invites your reports. In Oakland County, Joseph R. Montant, MD, and Bernard Berman, MD, were elected as new members of the Oakland County Board of Commissioners.

THE MSMS JUDICIAL COMMISSION, in one of its most important decisions of recent times, has ruled that a physician who sends specimens for tests to a laboratory and is billed for the service by a third-party corporation has an unethical relationship with that laboratory. The Commission ruled that such corporations, who contact the physician to offer the service, furnish him with supplies, pick up the specimens by courier and then pay him a commission for each patient are, in effect, paying the doctor a "finder's fee" for their customers (patients). The fee could also be called a rebate, and the practice, fee splitting. The Michigan Association of Osteopathic Physicians and Surgeons also ruled that such an arrangement is unethical and Michigan Blue Shield has changed its billing procedures to allow for the MSMS and MAOPS decisions. The arrangement with physicians and the laboratories was raised before the MSMS Judicial Commission by physicians in Allegan and Jackson counties, who have been contacted by Adserv, the corporation which in effect serves as a broker for Advance Labs.

MSMS MEMBERS ARE ALERTED to watch for their copy of the Michigan Relative Value Study (1971-72) which will be mailed soon by MSMS to all members. The coding and nomenclature will be that of the AMA's Current Procedural Terminology, Second Edition. The RVS Committee reported it was not possible to print MRVS with the 5-digit CPT code and the several 4-digit codes used by Shield, Government, etc., due to lack of uniformity. The Council has asked the Committee to study the possibility of such a comparison for the next edition.

THE MSMS POSITION THAT the State Department of Mental Health discontinue its requirement that community mental health agencies provide the name of a patient in coded form has been granted by the State. This matter was presented in resolution form by the Shiawassee County Medical Society to the MSMS House of Delegates which voted to oppose the Department's decisio

November 20, 1972 Vol. 71, No. 33

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MICHIGAN STATE MEDICAL SOCIETY

Published three times each month and four times in December and January, 38 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Mich. and at additional mailing offices. Yearly subscription rate, $9.00. Printed in USA. All communications should be addressed to the Publications Committee, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. © 1972 Michigan State Medical Society. Phone: Area Code 517, 337-1351.

EDITOR: HERBERT A. AUER

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LATE NEWS FROM THE MICHIGAN STATE MEDICAL SOCIETY

Michigan Medicine

November 30, 1972, Volume 71, Number 34
Michigan State Medical Society
Reading Time: 2 min. 25 seconds

MSMS DELEGATES to the AMA House of Delegates meeting in Cincinnati Nov. 26-29 voted with the overwhelming majority "to establish an Advisory Committee on Professional Standards Review to act as the medical profession's advocate to insure the proper implementation" of the PSRO thrust of recently signed HR-1 "to assure the best interest of the public and the profession." In effect, the action changed the AMA position on PSRO from one of opposition to one of working to formulate rules and regulations that would be most acceptable to physicians. HR-1, now Public Law 92-603 orders that PSROs be created as soon as possible after January 1, 1974.

For details about the AMA House action on this matter and on other reports and resolutions, please read the current issue of the American Medical News.

The MSMS delegation sponsored 5 resolutions, all of which were adopted or referred to the AMA Board of Trustees for further study. Details will appear in the January issue of Michigan Medicine in a report from Donald N. Sweeny, Jr., MD, Detroit, chairman of the Michigan delegation.

DONALD C. SMITH, MD, Ann Arbor, has been appointed by Governor Milliken to direct the new Office of Health and Medical Affairs within the Executive Office. Milliken explains, "This office will serve as my focal point for health policy advice." Doctor Smith, on leave from the University of Michigan where he is a professor of maternal and child health, has been invited to confer Dec. 6 with the MSMS Council.

THE NEXT MEETING of the new MSMS Medicaid Liaison Committee and the Governor's Medicaid Liaison Committee will be held Dec. 14. Matters of special concern to each committee will be identified for exploration and work-up, and future sessions will be scheduled to seek solutions to unresolved questions when necessary.

WHAT'S ON YOUR MIND? HELP MSMS WITH QUESTIONS FOR SURVEY .....

This newsletter asks again for MSMS members to tear off the form below and mail it to MSMS to provide input into MSMS plans for some opinion survey work. Plans are underway to use Medigram for the questionnaire in hopes of getting high returns. The MSMS House of Delegates has requested membership surveys on issues facing medicine. The MSMS Bureau of Economic Information will supervise the project.

I BELIEVE A MSMS MEMBERSHIP OPINION SURVEY SHOULD ASK THESE QUESTIONS:

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2.

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RE-REGISTRATION FEE LEGISLATION, enacted 15 months ago raising all health professions to $25 per year, will be effective for medical doctors Jan. 1, 1973. Physicians now are receiving notices from the Board of Registration in Medicine. The act was effective for most health personnel in 1972, but the Legislature delayed the increase for MDs from $5 per year until now. MSMS for several years successfully resisted attempts to increase the medical doctors' re-registration fee, and managed last year to avert a proposed $50 annual re-registration fee. Now medical and osteopathic doctors, dentists, chiropractors, optometrists and others will pay the same fee of $25. The re-registration deadline is Jan. 1, in contrast to previous date of March 1.

SEE A DOCTOR shortage ahead in your community? If so, MSMS Education Liaison Committee Chairman Brock E. Brush, MD, urges the component medical society or interested physicians to sponsor a Michigan medical student in a 10-week preceptorship-type program next summer. MSMS again will help students who have completed one or two years of medical school to be placed for 8 to 10 weeks in Michigan cities observing community medical practice as part of the SAMA-MECO project. Participating hospitals or clinics provide room and board and stipends to the students. Last summer 92 students participated at 56 hospitals in 51 Michigan communities. If interested, write to MSMS Communications Department, 120 W. Saginaw, East Lansing 48823.

THE CLINTON COUNTY MEDICAL SOCIETY will hold its regular meeting at the MSMS headquarters Dec. 5 with Councilor Robert Stow, MD, Lansing, and members of the MSMS executive staff presenting a program about "MSMS at Work." This is the fourth Central Michigan component society to schedule a membership meeting at the MSMS building.

PRESIDENTS-ELECT of the 55 component societies have been invited to participate in their annual workshop at MSMS Dec. 13. MSMS Council Chairman Robert M. Leitch, MD, will chair the meeting for a series of informative presentations by selected committee chairmen and MSMS staff specialists.

PHYSICIAN COOPERATION is sought by the State Department of Public Health and the State Department of Education through a questionnaire that will be mailed to doctors with the 1973 relicensure form. The return card will try to determine Michigan health manpower needs.

REPRESENTATIVES FROM ONTARIO, Ohio, Pennsylvania, Illinois and Minnesota joined MSMS leaders at the Third Annual Great Lakes Conference on Environment, sponsored by MSMS in Detroit, Nov. 9-10.

November 30, 1972 Vol. 71, No. 34

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Michigan Medicine

OFFICIAL JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY • VOLUME 71, NUMBER 35 • DECEMBER 1972

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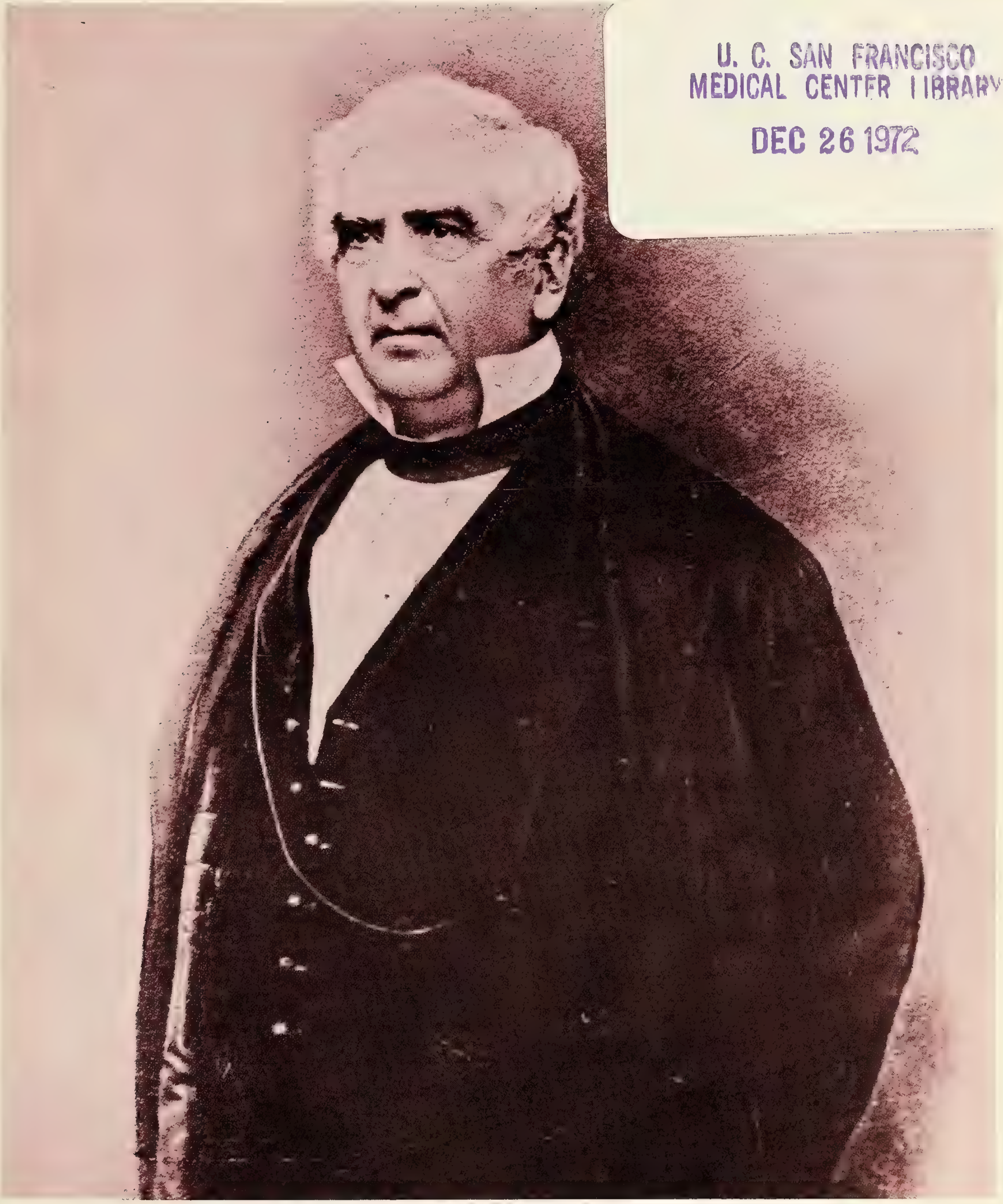

Zina Pitcher, MD, 1797-1872

For details on one of Michigan's earliest and most distinguished physicians, see page 1038.

Everybody experiences psychic tension.

Most people can handle this tension.

Some people develop excessive psychic tension and need your counseling,

and a few may need counseling
and the psychotropic action of Valium® (diazepam).

Before deciding to make Valium (diazepam) part of your treatment plan, check on whether or not the patient is presently taking drugs and, if so, what his response has been. Along with the medical and social history, this information can help you determine initial dosage, the possibility of side effects and the ultimate prospects of success or failure.

While Valium can be a most helpful adjunct to your counseling, it should be prescribed only as long as excessive psychic tension persists and should be discontinued when you decide it has accomplished its therapeutic task. In general, when dosage guidelines are followed, Valium is well tolerated (see Dosage). For convenience it is available in 2-mg, 5-mg and 10-mg tablets.

Drowsiness, fatigue and ataxia have been the most commonly reported side effects.

Until response is determined, patients receiving Valium should be cautioned against engaging in hazardous occupations requiring complete mental alertness, such as driving or operating machinery.

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Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

Supplied: Valium® (diazepam) Tablets, 2 mg, 5 mg and 10 mg; bottles of 100 and 500. All strengths also available in Tel-E-Dose® packages of 1000.

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(diazepam)

To help you manage excessive psychic tension

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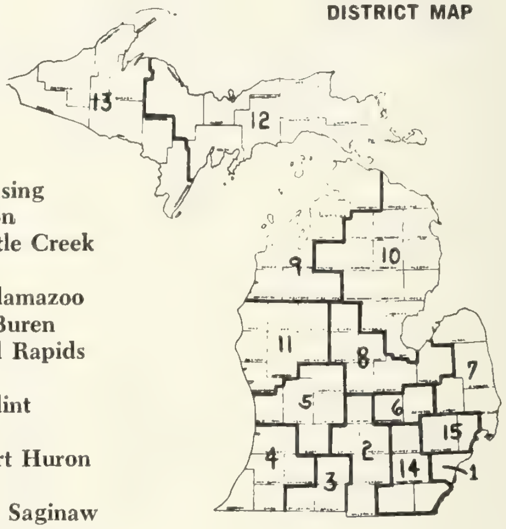
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Frank G. Bicknell, MD, Detroit
Brock E. Brush, MD, Detroit
Louis R. Zako, MD, Allen Park
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Counties: Clinton, Eaton, Hillsdale, Ingham, Jackson
Third District Councilor: Robert M. Leitch, MD, Battle Creek
Counties: Branch, Calhoun, St. Joseph
Fourth District Councilor: W. Kaye Locklin, MD, Kalamazoo
Counties: Allegan, Berrien, Cass, Kalamazoo, Van Buren
Fifth District Councilor: Noyes L. Avery, MD, Grand Rapids
Counties: Barry, Ionia-Montcalm, Kent, Ottawa
Sixth District Councilor: Ernest P. Griffin, Jr., MD, Flint
Counties: Genesee, Shiawassee
Seventh District Councilor: James H. Tisdel, MD, Port Huron
Counties: Huron, Sanilac, Lapeer, St. Clair
Eighth District Councilor: William A. DeYoung, MD, Saginaw
Counties: Gratiot-Isabella-Clare, Midland, Saginaw, Tuscola
Ninth District Councilor: Adam C. McClay, MD, Traverse City
Counties: Grand Traverse-Leelanau-Benzie, Manistee, Northern Michigan (Antrim, Charlevoix, Cheboygan and Emmet combined), Wexford-Missaukee
Tenth District Councilor: Robert C. Prophater, MD, Bay City
Counties: Alpena-Alcona-Presque Isle, Bay-Arenac-Iosco, North Central Counties, (Otsego, Montmorency, Crawford, Oscoda, Roscommon, Ogemaw, Gladwin and Kalkaska, combined)
Eleventh District Councilor: Leland E. Holly, II, MD, Muskegon
Counties: Mason, Mecosta-Osceola-Lake, Muskegon, Newaygo, Oceana
Twelfth District Councilor: Raymond Hockstad, MD, Escanaba
Counties: Chippewa-Mackinac, Delta-Schoolcraft, Luce, Marquette-Alger
Thirteenth District Councilor: Donald T. Anderson, MD, Wakefield
Counties: Dickinson-Iron, Gogebic, Houghton-Baraga-Keweenaw, Menominee, Ontonagon
Fourteenth District Councilor: Donato F. Sarapo, MD, Adrian
Counties: Lenawee, Livingston, Monroe, Washtenaw
Fifteenth District Councilors: (Macomb, Oakland Counties)
Sydney Scher, MD, Mount Clemens
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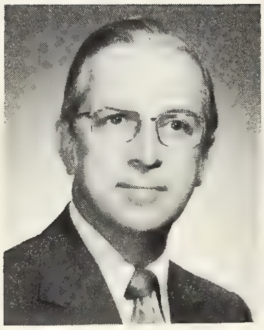
President's page

Giving due credit in the Medicaid affair



John J. Coury, MD
MSMS President

At the fall House of Delegates meeting I challenged the House of Delegates and Society to act in a responsible fashion. I was amazed that the House came back so fast with the unified position to reject the proposed Medicaid provider agreement from the Department of Social Services.

I not only was surprised but was pleased that the delegates acted in such unity. I am certain that unified action stimulated the MSMS leaders to become involved immediately to find a solution to the impasse that had been reached between the State and your State Medical Society. Less than two weeks passed and a solution was found, thanks to the action of the new MSMS Liaison Committee and the newly-formed committee named by Governor Milliken.

Michigan physicians and MSMS are indebted to several men who helped get the negotiations off the ground and out of their stalemate. I would like to thank personally Doctors Robert Prophater, Vernon Bass, Brooker Masters, and Robert Leitch, along with the very able members of our administrative staff—Warren Tryloff, Bruce Ambrose and Herb Auer. At that time we formed a new liaison committee to meet with the Governor's new committee. These men are: Doctors Ted Lahti, Robert Toteff, Jim Fryfogle, Dave Siegel and Brock Brush. To these men our Society is deeply grateful. I also would like to commend Governor Milliken for his excellent, reasonable committee consisting of John Dempsey, Bernard Huston, Doctor Maurice Reizen, Doctor Donald Smith and the Governor's Legal Advisor Ken Franklin.

The committees on both sides represented what one might call the epitome of reasonableness and integrity; with a sincere desire to resolve the problem, they did.

For several months prior to the House of Delegates' meeting, MSMS had a negotiating committee which met with executives of the Department of Social Services, as you know. That committee, which included Doctors Sid Adler, Ernest Griffin and Brooker Masters, and myself, worked effectively, I feel, to bring about many early improvements in the proposed Medicaid program for Michigan.

This story is a perfect example of how MSMS can work effectively to serve the people of Michigan as well as the members of our profession.

I wish to congratulate Governor Milliken for his sincere interest in the problem and his quick action to find a reasonable solution acceptable to both sides.

It is my hope that in the future the same type of atmosphere will exist in all discussions with the Department of Social Services. I am convinced, with the type of men that represent both organized medicine and the Department of Social Service, that this will happen. I am convinced that we are continuing to deal with reasonable people.

As you know, our Committee will have on-going discussions and negotiations with the Department of Social Services in an attempt to simplify the invoice form and to solve other problems involved with implementation of the new Medicaid program.

I ask that all of you seriously consider any problems that you have and that you be reasonable in your thinking. We always must keep the quality of health care foremost in our minds. We always will keep the care of the patient foremost in our minds.

Again I wish to express my thanks to the House of Delegates and to all of the men who have been so vitally concerned and interested in this problem.

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THE COVER

This month's cover photo is from a copy of the original owned by the Detroit Historical Society. The story of Doctor Pitcher's life appears on page 1038.

Publication of **Michigan Medicine** is under the direction of the Publication Committee, Michigan State Medical Society. The scientific editor is responsible for the scientific content. The managing editor is responsible for the production, correspondence and contents of the journal. He and the executive editor share final responsibility of the entire publication.

Neither the editors nor the state medical society will accept responsibility for statements made or opinions expressed by any contributor in any article or feature published in the pages of the journal. In editorials, the views expressed are those of the writer and not necessarily official positions of the society.

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Devoted to the interests of the medical profession and public health in Michigan.

INFORMATION FOR CONTRIBUTORS

1. Address scientific manuscripts to the Publication Committee, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. Submit original, double-spaced typewritten copy and two carbon copies or photo copies on letter size (8½ x 11 inch) paper. On page one, include title, authors, degrees, academic titles, and any institutional or other credits.
2. Authors are responsible for all statements, methods, and conclusions. These may or may not be in harmony with the views of the Editorial Staff. It is hoped that authors may have as wide a latitude as space available and general policy will permit. The Publication Committee expressly reserves the right to alter or reject any manuscript, or any contribution, whether solicited or not.
3. Illustrations should be submitted in the form of glossy prints or original sketches from which reproductions will be made by **Michigan Medicine**.
4. Articles should ordinarily be less than four printed pages in length (3000 words).
5. References should conform to *Cumulative Index Medicus*, including, in order: Author, title, journal, volume number, page, and year. Book references should include editors, edition, publisher, and place of publication, as well.
6. The editors welcome, and will consider for publication, letters containing information of interest to Michigan physicians, or presenting constructive comment on current controversial issues. News items and notes are welcome.
7. It is understood that material is submitted for exclusive publication in **Michigan Medicine**.

MICHIGAN MEDICINE is the official organ of the Michigan State Medical Society, published under the direction of the Publication Committee. Published three times a month, except four times in January, 37 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Mich. and at additional mailing offices. Yearly subscription rate, $9.00; single copies, 80 cents. Additional postage: Canada, $1.00 per year; Pan-American Union, $2.50 per year; Foreign, $2.50 per year. Printed in USA. All communications relative to manuscripts, advertising, news, exchanges, etc., should be addressed to Judith Marr, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. Phone Area Code 517, 337-1351.

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Should old depressives be forgot?

e geriatric depressive.
Unable to concentrate he tends
:ake little interest in the affairs
›und him. His reactions are slow
l delayed. He speaks very little.
ıen he does, it's mostly to com-
ıin of his insomnia, fatigue, or
ıstipation.

One way of relieving depression in the geriatric patient is with Tofranil.

Please read the prescribing information for details of usage (lower dosages are recommended for elderly patients and adolescents), precautions, warnings, contraindications, adverse experiences, and dosage recommendations. It is summarized below.

Tofranil® Geigy
imipramine hydrochloride USP

ınil® imipramine hydrochloride USP

raindications: The concomitant use of this agent
nonoamine oxidase inhibiting (M.A.O.I.) com-
ds is contraindicated. Hyperpyretic crises or
e convulsive seizures may occur. Potentiation of
rse effects can be serious or even fatal. An interval
least 14 days after M.A.O.I. therapy has been
ntinued should be allowed before this drug may
ıbstituted. Initial dosage should be low, increases
ld be gradual, and the patient's progress should
refully observed. The drug is also contraindicated
uring the acute recovery period after myocardial
ction, (b) in patients with known hypersen-
ty to the drug. Cross-sensitivity to other dibenz-
ıne compounds should be kept in mind.

Warnings: *Usage in Pregnancy:* Safe use of
amine during pregnancy and lactation has not
established; therefore, in administering the drug
egnant patients, nursing mothers, or women of
bearing potential, the potential benefits must be
hed against the possible hazards. Animal repro-
on studies have yielded inconclusive results.
e have been clinical reports of congenital mal-
ation associated with the use of this drug, but a
ıl relationship has not been confirmed.

Extreme caution should be used when this drug
en to:
ients with cardiovascular disease because of the
ssibility of conduction defects, arrhythmias,
ocardial infarction, strokes and tachycardia;
ients with increased intraocular pressure, history
ırinary retention, or history of narrow-angle
ucoma because of the drug's anticholinergic
perties;
perthyroid patients or those on thyroid medica-
n because of the possibility of cardiovascular
icity;
ients with a history of seizure disorder because
s drug has been shown to lower the seizure
eshold;
ients receiving guanethidine or similar agents
ce imipramine may block the pharmacologic
ects of these drugs.

Jsage in Children: Pending evaluation of results
clinical trials in children, the drug is not recom-
ed for use in patients under twelve years of age.

Since the drug may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks, such as operating an automobile or machinery, the patient should be cautioned accordingly.

Precautions: Because of the possibility of suicide in seriously depressed patients, careful supervision during the early phase of treatment is necessary and hospitalization may be required. Prescriptions should be written for the smallest amount feasible.

Hypomanic or manic episodes may occur, particularly in patients with cyclic disorders. Such reactions may necessitate discontinuation of the drug. If needed, imipramine may be resumed in lower dosage when these episodes are relieved. Administration of a tranquilizer may be useful in controlling such episodes.

Prior to elective surgery, imipramine should be discontinued for as long as the clinical situation will allow.

An activation of the psychosis may occasionally be observed in schizophrenic patients and may require reduction of dosage and the addition of a phenothiazine.

In occasional susceptible patients or in those receiving anticholinergic drugs (including antiparkinsonism agents) in addition, the atropine-like effects may become more pronounced (e.g. paralytic ileus). Close supervision and careful adjustment of dosage is required when this drug is administered concomitantly with anticholinergic or sympathomimetic drugs.

Patients should be warned that the concomitant use of alcoholic beverages may be associated with exaggerated effects.

Both elevation and lowering of blood sugar levels have been reported.

Concurrent administration of imipramine with electroshock therapy may increase the hazards; such treatment should be limited to those patients for whom it is essential.

Adverse Reactions: *Cardiovascular:* Hypotension, hypertension, tachycardia, palpitation, myocardial infarction, arrhythmias, heart block, stroke, falls.

Psychiatric: Confusional states (especially in the elderly) with hallucinations, disorientation, delusions; anxiety, restlessness, agitation; insomnia and nightmares; hypomania; exacerbation of psychosis.

Neurological: Numbness, tingling, paresthesias of extremities; incoordination, ataxia, tremors; peripheral neuropathy; extrapyramidal symptoms; seizures, alterations in EEG patterns; tinnitus.

Anticholinergic: Dry mouth, and, rarely, associated sublingual adenitis; blurred vision, disturbances of accommodation, mydriasis; constipation, paralytic ileus; urinary retention, delayed micturition, dilation of the urinary tract.

Allergic: Skin rash, petechiae, urticaria, itching, photosensitization (avoid excessive exposure to sunlight); edema (general or of face and tongue), drug fever, cross-sensitivity with desipramine.

Hematologic: Bone marrow depression including agranulocytosis; eosinophilia; purpura; thrombocytopenia. Leukocyte and differential counts should be performed in any patient who develops fever and sore throat during therapy; the drug should be discontinued if there is evidence of pathological neutrophil depression.

Gastrointestinal: Nausea and vomiting, anorexia, epigastric distress, diarrhea; peculiar taste, stomatitis, abdominal cramps, black tongue.

Endocrine: Gynecomastia in the male; breast enlargement and galactorrhea in the female; increased or decreased libido, impotence; testicular swelling; elevation or depression of blood sugar levels.

Other: Jaundice (simulating obstructive); altered liver function; weight gain or loss; perspiration; flushing; urinary frequency; drowsiness, dizziness, weakness and fatigue; headache; parotid swelling; alopecia.

Withdrawal Symptoms: Though not indicative of addiction, abrupt cessation of treatment after prolonged therapy may produce nausea, headache and malaise.

How Supplied: Round tablets of 25 and 50 mg.; triangular tablets of 10 mg. for geriatric and adolescent use; and ampuls, each containing 25 mg. in 2 cc. for I.M. administration. (B)98-146-850-H (7/71)

For complete details, including dosage, please refer to the full prescribing information.

GEIGY Pharmaceuticals
Division of CIBA-GEIGY Corporation
Ardsley, New York 10502

TO 8575

When you select this familiar antibiotic for IV infusion you have available a broad dosage range that hospitalized patients may need.

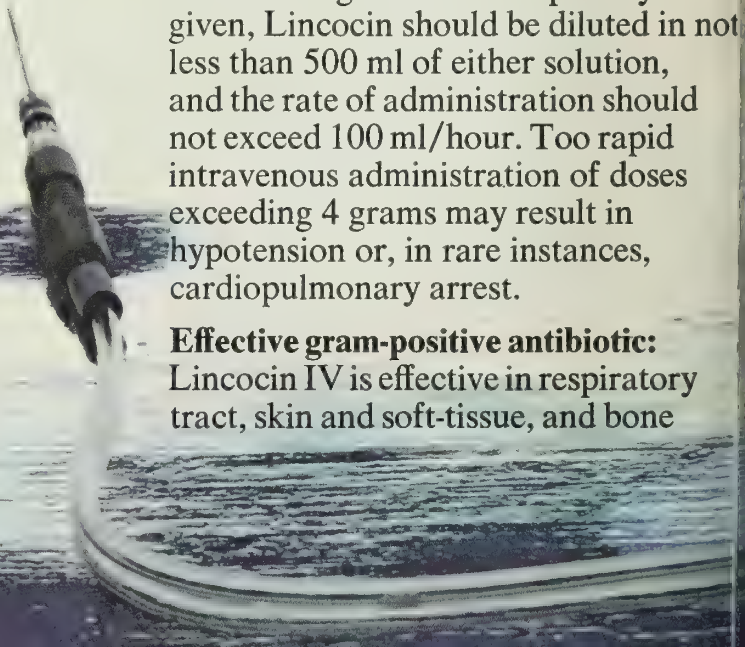
Intravenous Lincocin (lincomycin hydrochloride, Upjohn), with its 1.2 to 8 grams/day dosage range, covers many serious and even life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. Lincocin IV therefore can be as useful in your hospitalized patients as its IM use has proved to be in your office patients. As with all antibiotics, *in vitro* susceptibility studies should be performed.

1.2 to 8 grams/day IV dosage range: Most hospitalized patients with uncomplicated pneumonias respond satisfactorily to 1.2 to 1.8 grams/day of Lincocin IV. These doses may have to be increased for more serious infections.

In life-threatening situations as much as 8 grams/day has been administered intravenously to adults.

In usual IV doses, Lincocin (lincomycin hydrochloride, Upjohn) should be diluted in 250 ml or more of normal saline solution or 5% glucose in water. But when 4 grams or more per day is given, Lincocin should be diluted in not less than 500 ml of either solution, and the rate of administration should not exceed 100 ml/hour. Too rapid intravenous administration of doses exceeding 4 grams may result in hypotension or, in rare instances, cardiopulmonary arrest.

Effective gram-positive antibiotic: Lincocin IV is effective in respiratory tract, skin and soft-tissue, and bone



infections caused by susceptible strains of pneumococci, streptococci, and staphylococci, including penicillin-resistant strains. Staphylococcal strains resistant to Lincocin (lincomycin hydrochloride, Upjohn) have been recovered. Before initiating therapy, culture and susceptibility studies should be performed. Lincocin has proved valuable in treating patients hypersensitive to penicillin or cephalosporins, since Lincocin does not share antigenicity with these compounds. However, hypersensitivity reactions have been reported, some of these in patients known to be sensitive to penicillin.

Well tolerated at infusion site: Lincocin intravenous infusions have not produced local irritation or phlebitis, when given as recommended. Lincocin is usually well tolerated in patients who are hypersensitive to other drugs. Nevertheless, Lincocin should be used cautiously in patients with asthma or significant allergies.

In patients with impaired renal function, the recommended dose of Lincocin should be reduced to 25–30% of the dose for patients with normal kidney function. Its safety in pregnant patients and in infants less than one month of age has not been established.

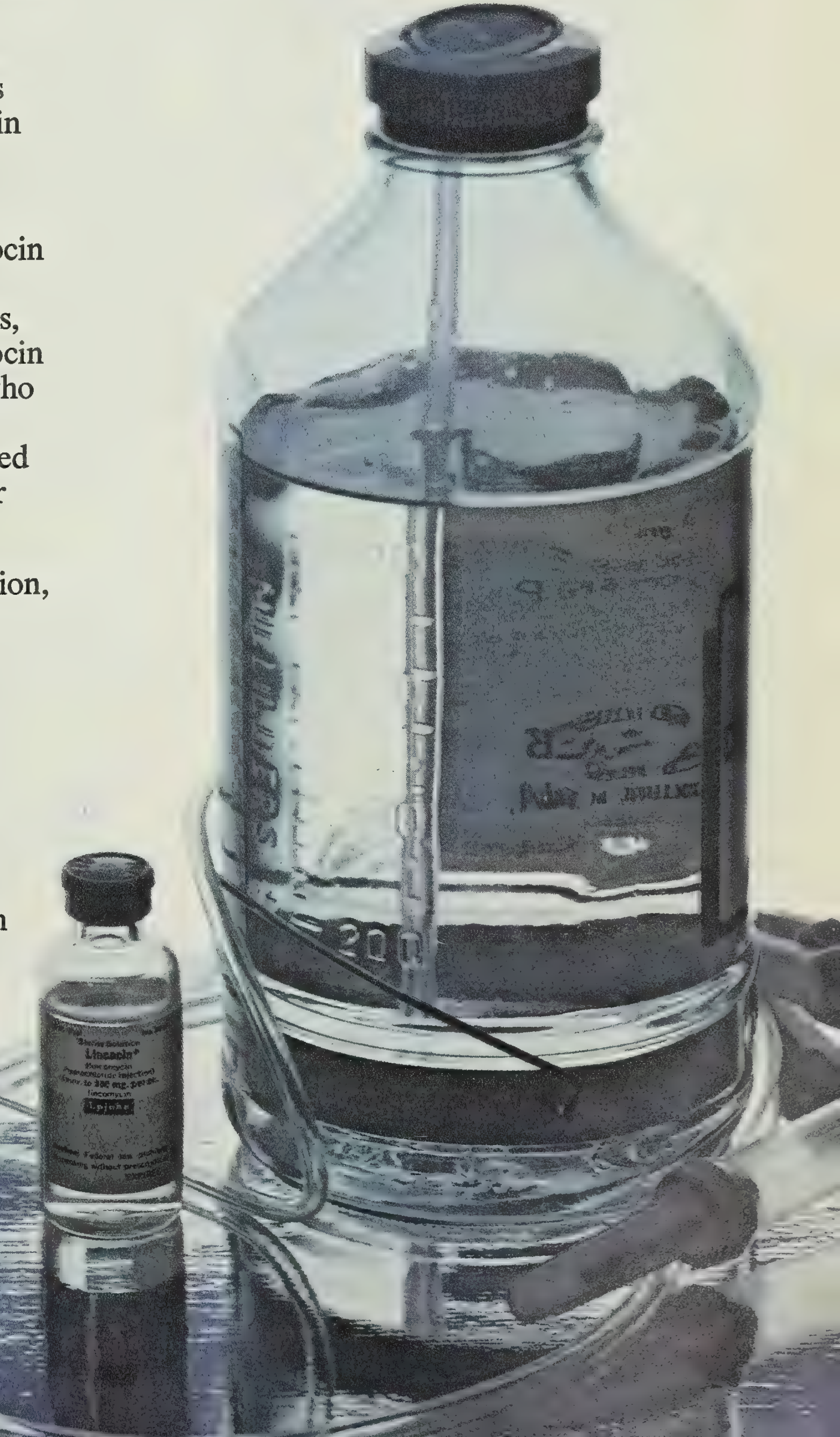
Lincocin may be used with other antimicrobial agents: Since Lincocin is stable over a wide pH range, it is suitable for incorporation in intravenous infusions; it also may be administered concomitantly with other antimicrobial agents when indicated. However, Lincocin should not be used with erythromycin, as *in vitro* antagonism has been reported.

Lincocin®

Sterile Solution (300 mg per ml)

(lincomycin hydrochloride, Upjohn)

For further prescribing information, please see following page.



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• Sterile Solution (300 mg. per ml.) •

Lincocin®

(lincomycin hydrochloride, Upjohn)

Up to 8 grams per day by IV infusion for hospitalized patients with life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. As with all antibiotics, *in vitro* susceptibility studies should be performed.

Each preparation contains:	Lincomycin hydrochloride monohydrate equivalent to lincomycin base
250 mg Pediatric Capsule	250 mg
500 mg Capsule	500 mg
*Sterile Solution per 1 ml	300 mg
Syrup per 5 ml	250 mg

*Contains also: Benzyl Alcohol 9 mg; and, Water for Injection—q.s.

Lincocin (lincomycin hydrochloride) is indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed. Cross resistance has not been demonstrated with penicillin, ampicillin, cephalosporins, chloramphenicol or the tetracyclines. Some cross resistance with erythromycin has been reported. Studies indicate that Lincocin does not share antigenicity with penicillin compounds.

CONTRAINDICATIONS: History of prior hypersensitivity to lincomycin or clindamycin. Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: *CASES OF SEVERE AND PERSISTENT DIARRHEA HAVE BEEN REPORTED AND HAVE AT TIMES NECESSITATED DISCONTINUANCE OF THE DRUG. THIS DIARRHEA HAS BEEN OCCASIONALLY ASSOCIATED WITH BLOOD AND MUCUS IN THE STOOLS AND HAS AT TIMES RESULTED IN AN ACUTE COLITIS. THIS SIDE EFFECT USUALLY HAS BEEN ASSOCIATED WITH THE ORAL DOSAGE FORM BUT OCCASIONALLY HAS BEEN REPORTED FOLLOWING PARENTERAL THERAPY.* A careful inquiry should be made concerning previous sensitivities to drugs or other allergens. Safety for use in pregnancy has not been established and Lincocin (lincomycin hydrochloride) is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infections for 10 days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihistamines available for emergency treatment. *Skin and mucous membranes*—Skin rashes, urticaria, vaginitis, and rare instances of exfoliative and vesiculobullous dermatitis have been reported. *Liver*—Although no direct relationship to liver dysfunction is established, jaundice and abnormal liver function tests (particularly serum transaminase) have been observed in a few instances. *Cardiovascular*—Instances of hypotension following parenteral administration have been reported, particularly after too rapid IV administration. Rare instances of cardiopulmonary arrest have been reported after too rapid IV administration. If 4.0 grams or more administered IV, dilute in 500 ml of fluid and administer no faster than 100 ml per hour. *Special senses*—Tinnitus and vertigo have been reported occasionally. *Local reactions*—Excellent local tolerance demonstrated to intramuscularly administered Lincocin (lincomycin hydrochloride). Reports of pain following injection have been infrequent. Intravenous administration of Lincocin in 250 to 500 ml of 5% glucose in distilled water or normal saline has produced no local irritation or phlebitis.

HOW SUPPLIED: *250 mg* and *500 mg* Capsules—bottles of 24 and 100. *Sterile Solution, 300 mg per ml*—2 and 10 ml vials and 2 ml syringe. *Syrup, 250 mg per 5 m*—60 ml and pint bottles.

For additional product information, consult the package insert or see your Upjohn representative.

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Upjohn

MSMS in action

Auxiliary, medical assistants on MSMS committee

In order to increase the participation of the Woman's Auxiliary and the state medical assistants society, two representatives of each have been appointed as advisors to the MSMS Committee on Public Relations.

MSMS President John J. Coury, MD, has appointed Mrs. Fleming Barbour, Flint, president, and Mrs. Charles Schoff, Midland, immediate past president of the Auxiliary; and also Betty Lou Willey, Port Huron, and Audrie Chute, Royal Oak, of the medical assistants. Mrs. Willey, as past state president, is now vice president of the American Association of Medical Assistants, and Mrs. Chute is president-elect of the State of Michigan chapter.

The two organizations will play major roles in carrying out the five major projects identified by the state PR committee for 1973; and will increase the involvement of their local chapters in efforts of the MSMS component societies.

Judicial Commission election results being tabulated

Dec. 1 was the deadline for returning completed ballots in the 1972 election to the MSMS Judicial Commission.

MSMS members in three Judicial Commission districts had the choice of re-electing their incumbent commissioners or choosing new ones after ballots were mailed Nov. 10 from MSMS headquarters. Two physicians must run in each district election.

The elections involve:

District 1, with Clarence L. Livingood, MD, Grosse Pointe, incumbent, and Marion G. McCall, Jr., MD, Detroit, challenger;

District 4, with H. Maxwell Golden, MD, Flint, incumbent, and John W. Grigg, MD, Bay City, challenger;

District 6—C. Allen Payne, MD, Grand Rapids, Judicial Commission chairman, incumbent; with William C. Baum, MD, Holland, and H. Clay Tellman, MD, Muskegon, challengers.

Doctor, you may be interested in these articles

Here is a list of articles generated by the MSMS Bureau of Economic Information during the past year. MSMS members wishing to receive copies of any of the articles may check the list and fill in name and address below. The MSMS Bureau will be happy to mail the copies out within the month.

________"How Physicians are Affected by Price Stabilization Regulations"

________"Universal Health Insurance"—a synopsis and comparison of four European national health insurance systems.

________"Explains Methods Used to Determine Medicare and Medicaid Percentiles"

________"MSMS Survey Shows Physicians' Earnings Rising Slower than Cost of Practice"

________"Where do Michigan Physicians Come From? MSMS Survey has the Answers"

________"Here's Ratio of Physicians/Patients in 10 Biggest States"

________"Phase II Price Controls to Lower Medicare Payments"

________"Here are the Facts on Physicians' Fees by Area and Procedure"

________"Just a Few Component Societies Have Most MSMS Members"

________"Doctors' Fees"—a report with facts that show doctors' fees and incomes are not out of line, as many claim they are.

________"The Decline of the U.S. Birth Rate"

NAME ________________________________

ADDRESS ______________________________

____

MSMS endorses UP study by MSU

The Michigan State Medical Society is supporting the new efforts of Michigan State University to determine the feasibility of setting up community-based medical training programs in the Upper Peninsula.

"The 1972 MSMS House of Delegates went on record to endorse and to assist the MSU College of Human Medicine feasibility study," explains Raymond Hockstad, MD, Escanaba, and Donald T. Anderson, MD, Iron Mountain, both members of The MSMS Council.

"The MSMS delegates also voted to encourage MSU to recruit qualified students from rural Michigan for such a new program," Doctors Hockstad and Anderson added.

Highlights of MSMS Council meetings of Oct. 1, 4, 9, 1972

At its meeting Oct. 1, The MSMS Council

. . . recommended that the MSMS House of Delegates approve The Council's decision to advise MSMS members that further signing of Provider Agreements for the state's reimbursement of Medicaid patients be postponed until negotiation with the state on a per-case agreement mechanism could be completed.

. . . commended Harold H. Hiscock, MD, Flint, MSMS past president and retiring Council member, for his excellent work on The Council and in other society activities.

. . . presented framed awards to retiring members of The Council, who are Harold H. Hiscock, MD, Flint; Brooker L. Masters, MD, Fremont, and Ross V. Taylor, MD, Jackson.

. . . authorized the chairman to appoint MSMS representatives to observe an AMA pilot workshop Oct. 11-13 in Chicago on the subject of practice management.

At its meeting Oct. 4, The MSMS Council

. . . agreed to send a letter immediately to MSMS members informing them of the MSMS House of Delegates action recommending that physicians not sign the state's blanket provider agreement for the reimbursement of Medicaid patient care. The letter also urged Michigan physicians to continue to take care of Medicaid patients.

. . . elected Robert M. Leitch, MD, Battle Creek, as new chairman of The Council, succeeding Brooker L. Masters, MD, Fremont,

. . . elected Brock E. Brush, MD, Detroit, as new vice chairman of The Council, succeeding Doctor Leitch.

. . . re-elected as chairman of reference committees, Ernest P. Griffin, Jr., MD, Flint, Finance Committee; Ralph R. Cooper, MD, Detroit, Scientific and Educational Affairs Committee; Robert C. Prophater, MD, Bay City, Legislative Policy Committee, and Edward J. Tallant, MD, Detroit, Publication Committee.

At its special meeting Oct. 9, The MSMS Council

. . . confirmed the appointment of the permanent Liaison Committee with the Governor on Medicaid. Members of the committee are Brock E. Brush, MD, Detroit; James D. Fryfogle, MD, Detroit; Paul T. Lahti, MD, Royal Oak; David Siegel, MD, Lansing, and Robert Toteff, MD, Saginaw. Bruce Ambrose serves as staff assistant.

. . . agreed that councilors should ask component society officers and delegates in their districts to contact their legislators on an individual basis to explain the MSMS position on the provider agreements and request support, then report back to The Council at its November meeting.

Welcome

Members of the Michigan State Medical Society join in welcoming the following new members into a progressive state medical organization. MSMS is dedicated to promoting the science and art of medicine, the protection of the public health, and the betterment of the medical profession. Each new member is encouraged to join with other MSMS members at both the local and the state levels in achieving these goals.

John L. Alipit, MD, 32 S. Board St., Hillsdale 49242
Gail M. Barton, MD, NPI Univ. of Mich., Ann Arbor, 48104
Douglas M. Behrendt, MD, C-7175 Univ. of Mich., Ann Arbor 48104
Francis P. Bhagat, MD, 3815 Pelham Rd., Dearborn 48124
Roque L. Carbajo, MD, Henry Ford Hosp., Detroit 48202
Amnat Chandramakol, MD, 26168 Ryan, Warren 48091
Richard A. Fields, MD, 22341 Eight Mile Rd., W., Detroit 48219
Nicanor Guevarra, MD, 36640 Gratiot, Mt. Clemens 48043
Kamil Imamoglu, MD, 23000 Eastwood, Oak Park 48237
Maria D. Itchon, MD, 18819 Rosetta, East Detroit 48021
Stephen Kay, MD, 21701 Kelly Rd., East Detroit 48021
A. L. Koh-Guevarra, MD, 36640 Gratiot, Mt. Clemens 48043
Marvin M. Kirsh, MD, C-7175 Univ. of Mich., Ann Arbor 48104
Robert C. McDougal, MD, 1507 East Park Place, Ann Arbor 48104
Alex E. Moyyad, MD, 740 S. Emerick, Ypsilanti 48197
H. Allen Rankin, MD, 516 Bay St., Petoskey 49770
B. N. S. Rao, MD, 3710 Rue Foret #251, Flint 48504
K. V. Rao, MD, 2100 Fourth St., Jackson 49203
A. P. Rawson, MD, 124 E. Main St., Addison 49220
Jaime J. Rey, 11372 Whitcomb, Detroit 48227
Marshall L. Shearer, MD, 555 E. Williams, Ann Arbor 48108
Thomas M. Sodeman, MD, Dept. of Pathology, Univ. of Mich., Ann Arbor 48104
Ron J. VandenBelt, MD, St. Joseph Mercy Hosp., Ann Arbor 48104

It's a lot of cars for the money.

It has rack-and-pinion steering like the racing Ferrari. And a luxurious interior like the Mercedes-Benz 280SE.

It has independent front suspension like the Aston Martin. And the same amount of trunk space as the Lincoln Continental Mark IV.

It has front-wheel drive like the Cadillac Eldorado. And about the same headroom and legroom as the Rolls-Royce Silver Shadow.

The name of this remarkable automobile is the Audi 100LS. And what's even more remarkable about it is its price tag.

It's a lot less than you'd expect to pay for that many great cars.

The Audi®

OVERSEAS DELIVERY AVAILABLE

HOWARD COOPER PORSCHE AUDI – Ann Arbor
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WILLIAMS PORSCHE AUDI – Lansing
TOM SULLIVAN PORSCHE AUDI CO. – Birmingham
TRAVERSE MOTORS, INC. – Traverse City
CAMP'S CARS, INC. – Midland
NORTHLAND IMPORTS – Marquette
SOO IMPORTS, INC. – Sault Ste. Marie
PRESTIGE PORSCHE AUDI, INC. – Grand Rapids

Michigan mediscene

Dec. 6—The Council, MSMS headquarters, contact: Warren F. Tryloff, MSMS director

Dec. 6-12th—Annual Thyroid Workshop sponsored by Wayne State University School of Medicine, at Wayne County Medical Society, 1010 Antietam, Detroit, contact: Ali A. Abbasi, MD, Wayne State University School of Medicine, 540 E. Canfield, Detroit, 48201

Dec. 9—December Seminar, "Odontogenic Tumors," the Michigan Society of Pathologists, Rackham Auditorium, The University of Michigan, Ann Arbor, contact: Jacob E. Briski, MD, Saint John Hospital, 22101 Moross Road, Detroit, 48236

Dec. 13-16—Seminar on emergency medicine, sponsored by Michigan chapter, American College of Emergency Physicians, Detroit General Hospital Emergency Department and Wayne State University Surgery Department, at Wayne County Medical Society headquarters, contact: Ronald L. Krome, MD, director, Emergency Department, Detroit General Hospital, 1326 St. Antoine, Detroit, 48226.

Jan. 20-21—Midwinter seminar of the American Association of Medical Assistants, State of Michigan Branch, Hayes Hotel, Jackson, contact: Margaret Broadwell, Michigan president, 406 Professional Plaza, 3800 Woodward Ave., Detroit, 48201

Jan. 30—Board meeting, Woman's Auxiliary to MSMS. MSMS headquarters, contact: Mrs. Fleming Barbour, 2015 Lincoln Drive, Flint, 48503

One - quarter of UP physicans graduated from U - M

John H. Anthony, Chief, MSMS Bureau of Economic Information, has compiled some interesting figures which show the medical alma maters of Upper Peninsula physicians.

Fifty-four of the 202 U.P. doctors are graduates of the University of Michigan Medical School; 22 are graduates of Wayne State University's School of Medicine; 16 are graduates of foreign medical schools; 12 of Northwestern University Medical School. Nine each are graduates of Stritch and Marquette University schools of medicine; seven each of Loma Linda University and the University of Illinois medical schools, six of Canadian medical schools, and five each of Rush and University of Wisconsin medical schools.

Nearly 50 more Upper Peninsula physicians are graduates of 35 other medical schools around the U.S.

Feb. 6-10—American Group Psychotherapy Association, Hilton Hotel, Detroit, contact: Margaret Keefe, administrative secretary, 1865 Broadway, New York, 10023

Feb. 7-9—Western Michigan Nuclear Medicine Conference, Holiday Inn, Petoskey, sponsored by Hackley Hospital, Muskegon, and Central chapter of the Society of Nuclear Medicine, contact: James C. Carlson, MS, Hackley Hospital, 1700 Clinton St., Muskegon

Feb. 11-15—Symposium, "How does change occur in psychotherapy?", Shanty Creek Lodge, Bellaire, contact: Reuven Bar-Levav, MD, 823 Fisher Building, Detroit, 48202

Feb. 24—February seminar, "Human diseases of trace metal metabolism," sponsored by Michigan Society of Pathologists, Henry Ford Hospital Auditorium, contact: Jacob E. Briski, MD, Pathology Department, Saint John Hospital, 22101 Moross Road, Detroit, 48236

Feb. 26-March 2—Clinical gastroenterology postgraduate course sponsored by the American College of Physicians, Towsley Center, University of Michigan Medical Center, Ann Arbor, contact: H. M. Pollard, MD, 2012 Vinewood Blvd., Ann Arbor, 48104

March 16-17—25th anniversary symposium, "Epilepsy '73: A multidisciplinary symposium on current developments," sponsored by Epilepsy Center of Michigan, Wayne County Medical Society headquarters, contact: Miss Cheek, Epilepsy Center of Michigan, 10 Peterboro, Detroit, 48201

March 18—Board meeting, American Association of Medical Assistants, State of Michigan Branch, MSMS headquarters, contact: Margaret Broadwell, 406 Professional Plaza, 3800 Woodward Ave., Detroit, 48201

March 20—Annual Legislative Day, Woman's Auxiliary to MSMS, Olds Plaza Hotel, Lansing, contact: Mrs. R. J. Westerhoff, 2458 Maplewood, SE, Grand Rapids, 49506

March 21-22—Annual Michigan Conference on Maternal and Perinatal Health, Olds Plaza Hotel, Lansing, contact: Helen Schulte, MSMS headquarters

April 26-29—Annual State Convention, AAMA, Michigan branch, Dearborn Inn, Dearborn, contact: Margaret Broadwell, 406 Professional Plaza, 3800 Woodward Ave., Detroit, 48201

May 4-5—Sixth Annual Cancer Symposium, "Management of Advanced Breast Carcinoma," sponsored by Wayne State University School of Medicine and American Cancer Society—Michigan Division, and Michigan Cancer Foundation, Wayne County Medical Society headquarters, $25 fee, contact: Mrs. Dorothy Bewley, Symposium Registrar, 4160 John R Street, Detroit, 48201

May 10-11—Sixteenth Annual Clinic Days, Children's Hospital of Michigan, at new hospital in Detroit Medical Center, contact: Edward W. Green, MD, Children's Hospital, 3901 Beaubien Blvd., Detroit, 48201

May 15-16—Spring conference, Woman's Auxiliary to MSMS, Hidden Valley Lodge, Gaylord, contact: Mrs. Fleming Barbour, 2015 Lincoln Drive, Flint, 48503.

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> *"The history of science, and in particular the history of medicine . . . is . . . the history of man's reactions to the truth, the history of the gradual revelation of truth, the history of the gradual liberation of our minds from darkness and prejudice."*
>
> *—George Sarton, from "The History of Medicine Versus the History of Art"*

Are combination drug products useful in treatment involving concomitant use of two or more drugs?

Opinion

Results of a questionnaire to 7,000 physicians:

62.9%
Believe combination drug products are useful.

13.8%
Do not believe combination drug products are useful.

Are combination drug products useful in treatment involving concomitant use of two or more drugs

Opinion & Dialogue

Doctor of Medicine

Louis Lasagna, M.D.
Professor and Chairman
Department of
Pharmacology & Toxicology
University of Rochester
School of Medicine
and Dentistry

Obviously, many drugs are given concomitantly. Whether it makes sense to combine medications in one preparation, be it capsule, tablet, or liquid, is a question that can be answered only by examining the advantages and disadvantages in the individual case.

Among the advantages is, first of all, convenience. The more medications that are taken concurrently and the more complicated the directions, the less likely the patient is to take medications accurately. From the standpoint of convenience and accuracy, and economy as well, you can make an important case for putting medications together in one preparation, as long as they are compatible.

By the same token, when you prescribe a properly tested and rational combination, you should have less worry about pharmaceutical or pharmacological compatibility – and about reasonable dosage ratios as well. Compatibility of the formulation should be demonstrated in the laboratory and clinic before the product is available for prescription—which is more than can usually be said for the physician's own spontaneous creations. And, the dosage ratios employed in rational precompounded combinations are designed to meet the needs of substantial numbers of "typical" patients.

There is no doubt that many "atypical" patients are to be found, and for them the prefabricated combination must be rejected. But that hardly argues for eliminating rational combinations from the market. Think, for example, of the problems that would arise if the components of widely accepted combinations, like the oral contraceptives and the diuretic-antihypertensives, always had to be prescribed, purchased and ingested separately.

One disadvantage that comes to mind is some doctors' unawareness of the ingredients a given combination contains. For example, a doctor might know that a patient is allergic to aspirin but forget that a certain analgesic mixture, which he knows only by its trade name, contains aspirin. His prescription, then, causes considerable discomfort, to say the least. This problem is a function of physician education, rather than of combination therapy as such. Improving doctors' knowledge about all medicaments they prescribe is a problem that deserves tackling on its own.

Another accusation leveled at combination drugs is that they encourage sloppiness of diagnosis and treatment. In many cases, however, a combination may prove to be the most effective choice. A good example of the usefulness of combinations appears in a recent article in the *Journal of Chronic Diseases* on the efficacy and side effects of an antihypertensive containing three ingredients, in which the track records of the combination drug and the individual ingredients were compared. Interestingly enough, whether the drugs were given individually or together, incidence and severity of side effects were the same. But blood pressure control was invariably better when the drugs were taken in one combination tablet than when they were taken separately (in "titratable" dosage) or in two or three different tablets.

Deciding which combinations constitute rational therapy obviously leads to a discussion of who is to determine which should be used and which should not. Realistically, I think combinations should be evaluated somewhat differently if they are old and established or new and untried.

In today's regulatory atmosphere, there is no possibility of a new combination being put on the market without a substantial amount of acceptable evidence in the form of controlled trials that show it to be safe and efficacious. On the other hand, I believe a different set of standards should apply to combination preparations that have been around for a long time. In other words, physician acceptance over a long period should be given some weight as evidence of the efficacy and safety of these drugs.

The FDA, however, does not seem to share this attitude. It often requires, for these older products, controlled trials that will monopolize the time of already overtired investigators and cost a greal de
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One of a series

Maker of Medicine

W. Clarke Wescoe, M.D.
President
Winthrop Laboratories

If two medications are used effectively to treat a certain condition, and it is known that they are compatible, it clearly is useful and convenient to provide them in one dosage form. It would make no sense, in fact it would be pedantic, to insist they always be prescribed separately. To avoid the appearance of pedantry, the "expert" decries the combination because it is a fixed dosage form. When the "expert" invokes the concept of fixed dosage form he obscures the fact that single-ingredient pharmaceutical preparations are also fixed dosage forms. By a singular semantic exercise he implies a pejorative meaning to the term "fixed dose" only when he uses it with respect to combinations. What is ignored is the simple fact that only in the rarest of circumstances does any physician attempt to titrate an exact therapeutic response in his patient. It is quite possible that some aches and pains will respond to 500 mg. of aspirin yet that fact does not militate against the *usual* dose being 650 mg.

The other semantic ploy often called into play is to describe a combination product as rational or irrational.

Take antibiotic mixtures, the source of much of the criticism generated against combinations generally. Obviously, no one should be exposed willy-nilly to the potential side effects of two or three antibiotics when only one is needed. At the same time there are cases where it is prudent to prescribe more than one. The clinician is the judge in these circumstances, as he should be.

There is no clear definition of the word rational. Most persons, I suppose, would find it synonymous with reasonable, but in many circumstances it may best be defined as the opinion of those in power at the moment.

Other factors govern combination therapy, not the least of which has been its broad use by practicing physicians anxious to achieve convenience in prescribing, to reduce medication error, and to save money for their patients. Combinations clearly have met the test on all three counts.

I have been impressed by studies showing that the rate of error climbs markedly with the number of medications to be taken, even with sophisticated patients. When medically justified, therefore, this factor alone supports the logic of combination therapy.

The cost argument for combinations appears to be irrefutable. In 1971, R. A. Gosselin studied the 71 combination products (excluding oral contraceptives) among the 200 most prescribed drugs. The study found that if all 71 products were discontinued, and if each ingredient in these combinations were prescribed separately, the price of medicines to patients would jump by $443.2 million on a national basis! At a time when the cost of medical care is under so much fire, it would be nonsensical to boost costs without clearly irrefutable medical reasons.

The part played by government on this question, of course, is fundamental. The FDA should play a role in determining which combinations are reasonable. That role, as defined by law and regulation, is to ensure that any medication on the market is safe and effective in line with its label claims. Certainly combinations are entitled to as much consideration as single entities—neither more nor less. So long as the addition of one drug to another does not make either less safe, or less effective, so long as they are compatible in a formulation, we have a reasonable product. It makes no sense to recommend the use of two products for certain conditions and to deny their being combined in a single form. An unhappy side effect of the problem concerns the efficacy panel discussions of many products submitted for review. The term "effective, but" has been freely interpreted to mean "ineffective" in toto, regardless of the merit of the individual drugs. This interpretation has placed numerous useful combination products in needless jeopardy.

In reading the actual reports of the review panels, it seems clear that some of the ratings were based less on scientific research and clinical observation than on the "informed" opinions of the panelists. These "informed" opinions were accepted at face value, while the "informed" opinions of others who had used the products were rejected. All of this put combination products into a sort of scientific never-never land.

It should be kept in mind by all, government as well as others involved in our health care system, that advances in therapy are seldom made in leaps and bounds but rather by small painstaking steps—and that some of these steps have resulted from research in combination drugs as well as with single entities. Given the near-infinite biologic variation in patient response, this is hardly surprising to clinicians. It should not be to regulatory agencies either.

In the end, the practicing physician is in the best position to decide if a particular combination makes sense. Such a decision should not be made exclusively by those whose responsibility for continuing clinical care is limited. Clinicians are the best judges of efficacy because the ultimate proof of any product's effectiveness is acceptance by physicians who have observed its actions in patients over time. The corollary statement may be made about over-the-counter medicines, which would not long survive if they failed to afford the relief the user anticipates. That the antihistamine in a "cold" remedy may not *always* be necessary is no reason to proscribe the combination generally.

Opinion & Dialogue

What is your opinion, doctor?
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Scientific papers

Current management of the nephrotic syndrome in childhood with emphasis on the role of cyclophosphamide

By Robert C. Kelsch, MD
William J. Oliver, MD
Ann Arbor

The purpose of this paper is to describe the forms of nephrotic syndrome seen most frequently in children and to present our experience in the management of 150 such children during the past five years.

The major manifestations of the nephrotic syndrome consist of generalized edema, massive proteinuria, hypoproteinemia, and hyperlipemia. Associated findings considered more characteristic of nephritis, namely, hypertension, hematuria and azotemia, are observed in approximately 10% of the nephrotic children. A current classification of the nephrotic syndrome which has been useful to us is given in **Table I**. Although all of these possibilities must be considered when initially seeing a child with the nephrotic syndrome, Groups I and II will account for well over 95% of the children with this disease complex. The combined experience of Churg, et al.,[1] and White, et al.,[2] as tabulated in **Table II**, indicates that three-quarters of the children with the nephrotic syndrome will have minimal lesions on examination of renal biopsy material and will have a favorable response to steroid therapy. The remaining 25% will have either some form of glomerulonephritis or a readily recognized systemic or toxic disease, as listed under categories III through VII, in **Table I**.

Table I. Etiology of Nephrotic Syndrome in Children

I. **Idiopathic ("Childhood" or "Lipoid Nephrosis"):** "Minimal Lesion," "Steroid-Responsive"
II. **Glomerulonephritis:**
  1. Focal Sclerosis
  2. Proliferative (Mesangial; with crescents; Membranoproliferative)
  3. Epimembranous
III. **Systemic Hypersensitivity Diseases:** Lupus, Polyarteritis, Anaphylactoid Purpura
IV. **Circulatory Diseases:** Sickle Cell Anemia, Renal Vein Thrombosis, Constrictive Pericarditis
V. **Specific Toxins:** Trimethadione, Mercury, Gold Salts, Heroin
VI. **Infections:** Malaria (P. malariae), Syphilis
VII. **Congenital**

Table II

Correlation of Histologic Changes With Steroid-Responsiveness*

			Steroid Responsive	
	#	%	#	%
Glomerular Morphology				
A. Minimal Changes	193	75	186	96
B. Glomerulonephritis (Focal Sclerosis, Proliferative Nephritis, and Membranous Nephritis)	62	25	9	14
TOTAL	255		195	

*Combined data from Churg, et al.[1] and White, et al.[2]

Some practical clinical and laboratory clues which may assist the physician in categorizing a patient into either Group I or II are given in **Table III**. Despite the value of histologic classification, it is apparent that the question of steroid response is the most meaningful in terms of patient care. Since some patients in the glomerulonephritis category (**Table I**, Group II) do respond to steroids (**Table II**), it is apparent that a cautious trial of steroid treatment is indicated in all children thought to have minimal lesions (Group I) or glomerulonephritis (Group II). Because the initial response to steroid therapy is important in predicting the ultimate prognosis, we believe the intensity of the initial treatment should assure that the patient can be properly classified as "steroid

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Doctor Kelsch is associate professor and Doctor Oliver is chairman, Department of Pediatrics and Communicable Diseases, University of Michigan.

Table III: Characteristics of Primary Nephrotic Syndrome

Idiopathic	**Glomerulonephritis**
"Lipoid Nephrosis":	(Focal Glomerulosclerosis Proliferative G.N. Epimembranous)
Pre-School Age	Any age
Boys > Girls	Boys = Girls
Little or No:	Frequent:
Hypertension	Hypertension
Hematuria	Hematuria
Azotemia	Azotemia
Complement Normal	Complement Low
Proteinuria Selective	Proteinuria Non-Selective
Steroid-Responsive	Steroid-Unresponsive
Biopsy: Minimal Lesions	Biopsy: Distinct Lesions

Table IV: Indications for Cyclophosphamide Therapy in 27 Children With Steroid-Responsive Nephrotic Syndrome

	NUMBER
1. Steroid Dependency with Severe Cushingoid Changes	15
2. Short Stature	7
3. Cataracts	4*
4. Psychotic Response	2
5. Glucosuria with High Fasting Blood Sugar	1

*Also short stature in three with cataracts and in one with high fasting blood sugar

responsive" by exhibiting complete remission of proteinuria, or that the patient is "steroid resistant," i.e., exhibits continuation of proteinuria and other abnormalities. Our philosophy of management is the concept that children responding with diuresis and complete remission of proteinuria coincident to steroid therapy will have a good prognosis despite multiple relapses. Continued favorable responses to repeated courses of steroid therapy can be anticipated in this group. We do not believe these children benefit from information obtained from renal biopsy. On the other hand, those who do not respond to vigorous steroid therapy should have a renal biopsy because their long term prognosis may not be favorable and other modalities of therapy should be considered.

Our usual approach to initial therapy in a child with the first recognized episode of the nephrotic syndrome is to administer prednisone at a dosage of two mg/kg. (one mg/lb) in daily divided doses for three to four weeks, with a rapid tapering to zero dosage over the last three to four days. The short course, consisting of a total of three weeks, is used in patients in whom diuresis and cessation of proteinuria occur during the first two weeks of steroid therapy, while the longer course is reserved for patients who have longer periods of edema and proteinuria before improvement is evident. Two other approaches to initial therapy are currently in use and have been relatively successful. The first is the use of alternate day steroid therapy, three to four mg/kg of prednisone given in a single dose every other morning.[3] The second is the use of cyclophosphamide two to three mg/kg given daily for six months or longer. Our objections to these approaches to therapy are that: a) the induction of a complete remission, i.e., cessation of proteinuria, is considerably delayed and b) neither has been demonstrated to induce a complete remission as frequently in children as the more conventional steroid therapy which we presently use.

During the period of daily steroid therapy we advocate a no-added salt diet. Potassium supplements are not generally required. Infections should be treated appropriately before commencing steroid therapy but prophylactic antibiotics have not been useful. In all patients in whom steroid therapy is planned, it is pertinent to obtain a chest X-ray and a tuberculin skin test to make certain that activation of unsuspected tuberculosis does not occur during steroid therapy. Vigorous treatment of edema with diuretics or severe salt restriction is not indicated since edema is a *symptom* much like dyspnea, and the physician's efforts should be directed toward the primary problem, i.e., proteinuria, and not at a symptom of the disease. This cautionary note is more pertinent since the advent of potent diuretics such as furosamide and ethacrynic acid. The use of these diuretics to produce loss of edema in nephrotic children will consistently lead to hypokalemia, metabolic alkalosis, and, in some children, hypovolemic vascular collapse. The rare indications for their use will be discussed in a subsequent section.

Following the induction of remission (urine completely free of protein), it is our practice to give interrupted steroid therapy for an additional eight weeks if it is the first attack of the nephrotic syndrome. There are two forms of interrupted therapy in general use today: the first consists of administering two mg/kg of prednisone in divided doses on the first three days of each week, and none for the subsequent four days; the second approach is the administration of three to four mg/kg of prednisone in a single dose given in the early morning once every 48 hours.[3] On the completion of eight weeks of either form of interrupted therapy, treatment is abruptly discontinued. This relatively short course of therapy is suggested since approximately 20% of the children have only one episode of the disease and longer therapy is not needed. The majority of children, however, will relapse. They require another course of intensive therapy plus a follow-through program consisting of either form of interrupted treatment for one year after the second or subsequent relapses. Available, but incomplete data, predict that most children will cease having exacerbations after five to ten years.

Since steroid-responsive nephrotic syndrome is characterized by frequent relapses, it is important to emphasize that the child should be encouraged to lead a normal life without restrictions. Specifically, we do not exclude any form of exercise nor prescribe rest. It is important to develop an informed family regarding all aspects of the disease. The small booklet* available for parents has been useful in explaining this disease and assuring parental cooperation.

It has been our experience that of children with steroid-responsive nephrotic syndrome (Type I), approximately one quarter will develop one or more complications of steroid treatment. For these patients, we have adopted a program which combines cyclophosphamide and steroid therapy. The effect of this program is the induction of remissions of longer duration than those achieved with steroid therapy alone.[4] This has reduced the need for continuous long-term steroid therapy. **Table IV** lists the indications we use for initiating combined treatment.

Children who require repeated courses of steroid therapy with resultant failure of normal height growth, particularly in adolescence, are unlikely to achieve reasonable height unless steroid therapy can be terminated. We have found cyclophosphamide particularly useful in this group. We use, as a practical guideline, the evidence that height has fallen below the tenth percentile on standard growth charts over several years as an indication for this treatment.

The early recognition of steroid-induced cataracts requires that the physician examine the patient's lenses on each office visit. This is simply performed by using an ophthalmoscope which is set at an appropriate correction to visualize the iris; the cataracts will be found in the same plane. Generally, plus 15 diopters will focus on the iris and the lens. Detection of cataracts is an indication to consider cyclophosphamide.

Glycosuria with normal fasting blood sugar is frequent during all forms of steroid treatment. The finding of an associated high fasting blood sugar is an indication to consider cyclophosphamide therapy.

Cyclophosphamide has been used either singly[5] or in combination with steroid therapy.[4,6] Our recent experience has been derived from the combined use of cyclophosphamide and steroids. The optimal method for using cyclophosphamide has not yet been defined, but our present program appears to avoid some of the drug toxicity which we experienced with some earlier therapeutic regimens. Presently, we use cyclophosphamide in a dose of 2 mg/kg/day in two divided doses for three consecutive months. Simultaneously we give prednisone at a dose of three to four mg/kg on alternate days in a single dose in the early morning. Proteinuria usually ceases within one month and both medications are abruptly discontinued at the end of three months, provided all findings of the nephrotic syndrome have been absent for two months. We caution patients to void completely before retiring at night. Failure to follow this recommendation may result in episodes of hemorrhagic cystitis. Although exquisitely uncomfortable to the patient, these episodes will spontaneously subside in two to three days if cyclophosphamide is discontinued. In our early experience with cyclophosphamide, alopecia occurred in approximately 60% of the patients whom we treated at a dose of four to five mg/kg/day; no child has developed alopecia on the dose of two mg/kg/day. Leukopenia was common during the third to fourth week of treatment when we used the four to five mg/kg/day dosage. Leukopenia rarely develops at our present recommended dosage. We have, however, seen it in one patient and, therefore, we continue to check white blood counts weekly while the patient is on the drug. If the white blood count falls below 4,000 we discontinue treatment until it has returned to 5-6,000 and then reinstitute cyclophosphamide at three-fourths its previous dose. Because steroid therapy induces granulocytosis, it is important that the while blood cell count be obtained routinely on the day that the child receives steroids. If this is not done, the white count may appear to fluctuate widely and cause confusion as to its true level. We do not use prophylactic antibiotics during a course of cyclophosphamide therapy.

Figure 1 depicts the overview of responses of children receiving a combined course of cyclophosphamide and prednisone therapy given because of steroid associated growth failure. It is evident that only one case had a relapse occurring in the first year following the remission induced by cyclophosphamide-prednisone therapy. Also noteworthy is the duration of remissions following the combined course as compared with prior experience in the same patients during periods in which prednisone alone was employed. The exacerbations experienced by four of 11 patients indicate that cyclophasphamide does not produce a cure of this form of the nephrotic syndrome. Remissions were again induced in each of these patients during subsequent courses of combined therapy. Our experience has been similar in patients receiving combined cyclophosphamide-prednisone therapy for steroid dependency with severe cushingoid changes, cataracts, steroid-induced diabetes mellitus, and major psychological disturbances.

Although the efficacious response of these children is evident, we are reluctant to recommend this as a primary therapeutic program for all chil-

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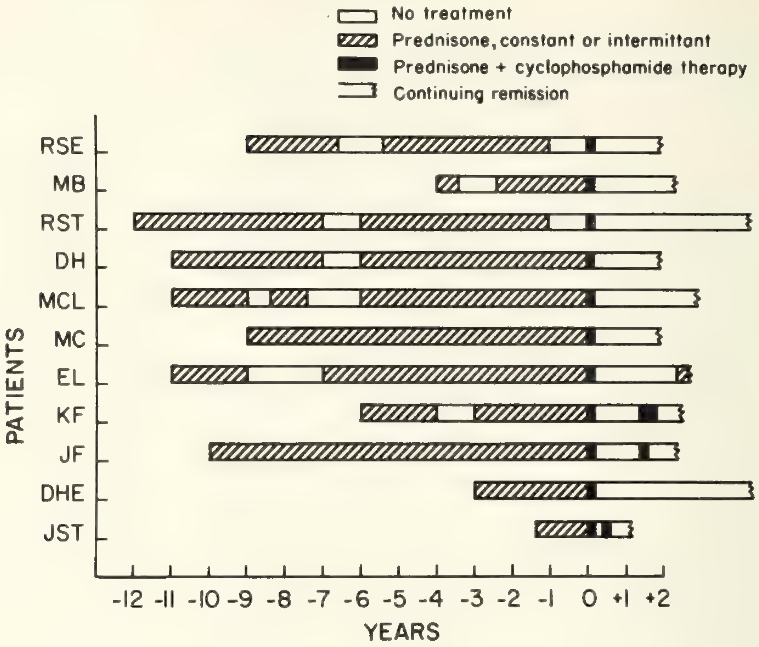
*"Nephrosis in Childhood: A guide for parents" Michigan Kidney Foundations Incorporated, 3378 Washtenaw Avenue, Ann Arbor, Michigan 48104

Comparison of the Duration of Remission Induced by Prednisone Versus Combined Prednisone – cyclophosphamide Therapy in Nephrotic Children



dren with minimal lesion nephrotic syndrome (Group I). The reasons for this hesitancy include: 1) The association of immune suppressive therapy with a small but real increase in the incidence of sarcome in patients following renal transplantation. 2) The reported changed in germplasm in patients receiving cyclophosphamide for various malignant diseases. This includes aspermia in males and disappearance of follicles in females. 3) The fundamental changes in hair structure manifest by transient development of curly hair following alopecia in some patients. 4) The occurrence of death associated with chickenpox in patients receiving cyclophosphamide therapy. Since we do not know the long-term consequences of cyclophosphamide therapy we have reserved this modality for children who have a major complication of steroid therapy or as described in the subsequent paragraphs who are resistant to steroid therapy.

Resistance to steroid therapy was observed in approximately 20% of the children in the combined reports of Churg, et al.[1] and White, et al.[2] (**Table II**). Although our clinical population is heavily weighted with referred patients, our experience during the last five years indicates approximately 10% of our nephrotic patients have steroid resistant nephrotic syndrome. Since the patients described by Churg, White, and collaborators[1,2] were unselected and our patients represent a selected population, the data reported by the former may be more representative of the frequency of steroid resistance in the general nephrotic population. In patients with steroid resistant nephrotic syndrome, defined as the lack of a favorable response at the end of four weeks of adequate steroid therapy, renal biopsy has proved to be a valuable study.

In 15 children classified as having steroid-resistant nephrotic syndrome, the histologic findings and responses to combined cyclophosphamide prednisone therapy are tabulated in **Table V. It** is noteworthy that three of the five patients with minimal lesions on renal biopsy responded with complete remission to combined cyclophosphamide-prednisone therapy. Of the remaining patients, two with minimal proliferative lesions exhibited complete remission coincident to combined therapy. From evaluating our data and the data of others we would suggest a trial of cyclophosphamide-prednisone treatment when the lesions are minimal in nature or only mildly proliferative. Unfortunately, one child has died of uremia despite an initial minimally abnormal biopsy and the use of combined therapy. In this regard out experience is similar to others.[1,2] These data exclude six patients with clinically rapidly progressing glomerulonephritis and histological changes of glomerulonephritis (diffuse, with or without crescents).

We have refrained from discussing the use of immuno-suppressant therapy in the nephrotic syndrome clearly associated with such systemic diseases as lupus erythematosis and polyarteritis since comment on these infrequently encountered diseases is considered beyond the scope of this paper.

Finally, a few comments related to the use of the newer diuretics in the treatment of nephrotic edema. It is clearly desirable to treat edema by removing the stimulus for its production. In those instances in which the nephrotic syndrome is responsive to steroid therapy, that is, proteinuria ceases, this is the treatment of choice. There is no reason to initiate aggressive treatment of edema which is not incapacitating to the patient in either a physical or functional sense. The use of diuretics under these circumstances offers no real advantage to the patient and adds some true risks.

In those patients in whom there is physical or functional restriction because of edema, i.e., encroachment upon the plural space or restriction of daily activities such as attendance at school, the new diuretics offer a valuable therapeutic aid. Even in these patients, the physician should keep his goal in mind, that is, that the patient have no physical or functional restrictions, and not aim for a "dry" patient.

Since most children with the nephrotic syndrome have increased aldosterone activity, it is not possible to produce sodium diuresis without large losses of potassium. It is therefore desirable to initially antagonize aldosterone activity by administration of an anti-aldosterone agent if hypokalemic metabolic alkalosis and tetany are to be avoided. For this purpose we use spironolactone at a dose of three mg/kg/day (1½ mg/lb/day) orally. This should proceed by one to two days the addition of the "loop" diuretics. Of the newer diuretics, we prefer furosamide since complications of deafness and gastrointestinal bleeding have been less frequently reported than with ethacrynic acid. The oral dose may be initiated at two mg/kg/day and progressively increased over subsequent days to a maximum of 6 mg/kg/day. It is rarely necessary to exceed this dosage to achieve an adequate diuresis in terms of comfort for the patient.

Once diuresis has been achieved, it is frequently satisfactory to use the medication two to three times a week rather than on a daily basis. In such instances the spironolactone should be continued daily.

If hypokalemic alkalosis does occur, potassium supplements are indicated. Potassium chloride is the drug of choice. Preparations of potassium such as the bicarbonate, gluconate or acetate should be avoided, since these drugs will not correct the hypokalemic alkalosis. We use 20% solutions of potassium chloride diluted in a palatable vehicle such as grape juice in a dosage of 3 mEq/kg/day. This will usually correct the deficit within several days.

If unsuccessful, it may be necessary to discontinue the diuretic and institute a low salt diet to achieve control of edema. We have not encountered a situation in which a diet containing less than 20 mEq of sodium per day is required to permit a patient to be reasonably comfortable under these circumstances.

Water restriction is not necessary. The blood urea nitrogen may be elevated in patients with the nephrotic syndrome who have undergone extentive salt restriction and diuretic therapy. As long as ratio of urine urea nitrogen concentration to blood urea nitrogen concentration is greater than 20, one can assume that elevation of the blood urea nitrogen observed is a manifestation of contraction of plasma volume and not indicative of significant renal failure. The physician, however, should be aware that under such circumstances hypovolemic shock may occur with vigorous use of sodium restriction and/or diuretics. Intravenous albumin given cautiously over several days should be instituted prior to administration of diuretics if symptomatic plasma volume contraction is present.

Summary

We have presented a current classification and mode of treatment of children with the nephrotic syndrome. Emphasis has been given to the steroid responsive, minimal lesion nephrotic syndrome which occurs in over 80% of children. We have also described the indications for, and our experi-

Table V

Comparison of Histologic Findings with Response to Combined Cyclophosphamide-Prednisone Therapy in Steroid Resistant Nephrotic Syndrome

Glomerular Changes	**Remission with Combined Therapy**	**Death**	**Total**
A. Minimal Changes	3		5
B. Focal Sclerosis	1	1	3
C. Proliferative Glomerulonephritis			
1) Mesangial	1*		2
2) Focal	1		1
3) With crescents			
4) Membrano-proliferative			1
D. Membranous Nephropathy			
	6	1	12

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*Relapsed and was resistant to second course

Drug therapy tips

By Clifford Hotte
Ann Arbor

Q. What is tobramycin?

A. *Tobramycin is an aminoglycoside broad spectrum antibiotic structurally similar to gentamycin, kanamycin and neomycin which has the highest specific activity and best spectrum of action of the eight nebramycin factors produced by* Streptomyces tenebrarius. *It is effective against Pseudomonas and Proteus infections by exerting a bacteriocidal action, supposedly by inhibiting protein synthesis of the bacterial cell. Tobramycin has demonstrated a nephrotoxic and ototoxic potential in animals and BUN may be slightly increased with this drug as with gentamycin.*

Q. What are the effects of alcohol and tobacco on blood pressure?

A. *In moderate amounts, alcohol exerts only moderate effects on circulation and blood pressure. Cardiac output and force of myocardial contraction do not change. Alcohol does cause vasodilatation, especially of cutaneous vessels, but this is most likely the result of central vasomotor depression since the direct action of alcohol on blood vessels is insignificant. Tobacco, on the other hand, will cause a rise in systolic and diastolic blood pressure in a majority of people. It is the nicotine content of tobacco which exerts the observed cardiovascular changes that occur as a result of smoking.*

Q. Would it be advisable to give phenothiazines for agitation due to amphetamine overdosage in a child?

A. *Chlorpormazine, a phenothiazine derivative, is known to be useful in the treatment of amphetamine overdose. The mechanism of action is not established but phenothiazines reportedly do inhibit "amine pump" mechanism responsible for the uptake of various amines, including amphetamines, into the adrenergic neurons. If a similar process occurs in the central nervous system, the central effects of amphetamines could be antagonized.*

Q. Can chloroquine or primaquine be used in pregnant women?

A. *Chloroquine is known to cross the placenta and may be harmful to the fetus when given in large doses. Primaquine, however, has not been found to possess teratogenic properties.*

Q. What is the generic name of Daonil® and what is the drug used for?

A. *Daonil® is the proprietary name given to glybenclamide by Hoechst Pharmaceutical Co. of Germany. It is a new oral hypoglycemic agent related to the sulfonylureas such as tolbutamide and chlorpropamide. Its mechanism of action is as that of the sulfonylureas in that it stimulates betapancreatic cells to produce insulin and has no effect on diabetes in patients void of pancreatic function.*

Mr. Hotte is affiliated with the Drug Information Center, University Hospital, Ann Arbor.

NEPHROTIC SYNDROME/Continued

ence with, cyclophosphamide and the newer diuretics in this disease.

References

1. Churg, J., Habib, R., White, R. H. R.: Pathology of the nephrotic syndrome in children. *Lancet I*: 1299-1302, 1970 (June 20, 1970).
2. White, R. H. R., Glasgow, E. F., Mills, R. J.: Clinicopathological study of nephrotic syndrome in childhood. *Lancet I*: 1353-1359, 1970 (June 27, 1970).
3. Soyka, L. F.: Treatment of the nephrotic syndrome in childhood. *Amer. J. Dis. Child.* 113: 693-701, 1967.
4. Barratt, T. M., Soothill, J. F.: Controlled trial of cyclophosphamide in steroid-sensitive relapsing nephrotic syndrome in childhood. *Lancet II*: 479, 1970.
5. Tsao, Y. C., Heung, C. G.: Paired trial of cyclophosphamide and prednisone in children with nephrosis. *Arch. Dis. Child.* 46: 327-331, 1971.
6. Etteldorf, J. N., Roy, S., Summitt, R. L., Sweeney, M. J., Wall, H.P., and Berton, W. M.: Cyclophosphamide in the treatment of idiopathic lipoid nephrosis. *J. of Ped.* 70: 758-766, 1967.

Physicians vs. Hospital Costs and Beds

By Floyd B. Levagood, MD, FACP
Dearborn

A study of the time consumed before a patient reached the operating room revealed a tremendous loss of time, money and available surgical bed space. An aggressive administrative pre-admission service is recommended with the cooperation of the insurance carriers.

The last decade has seen an ever-increasing cost as hospitals struggle to meet the pay scale of an affluent society. Fortunately for all, many people find hospital work rewarding beyond financial remuneration.

Good medical care, like all other factors, must be equated with cost, making full use of the law of averages. A study was designed to determine the amount of time consumed within the hospital before a patient reached the operating room. As a matter of convenience, the P.A.S.[1] reports for one year at the Northwest Unit[2] of The Grace Hospital were used. With these records it was possible to determine the number of days a patient remained in the hospital prior to surgery. The first reports were of such magnitude that it was decided to adjust the analysis by allowing 24 hours plus a variance for patient disease. Therefore, all patients with the following manifestations were deleted from the study:

a. Hemorrhage
b. Intestinal obstruction
c. Jaundice
d. Infection and/or abscess.

It is not to be implied that time is not and can not be wasted when dealing with these conditions. However, our goal is still the proper treatment of the patient. These problems are frequently the most perplexing and difficult of all medicine and surgery.

It was also felt that there should be a reasonable time before surgery to study the patient's general condition in an attempt to protect the patient with an unsuspected, undiagnosed, serious disease. Therefore, 24 hours were used as a cut off before the counting was started.

In **Table 1** it is immediately apparent that about 61% (4,727) of all patients were operated on within 24 hours or less following admission. This represents a commendable achievement on the part of the surgeons. The 508 deleted cases are those associated with difficult and serious problems. This leaves a total of 2,506 cases (32% of the total) with which this report is concerned.

The $301,840.00 is less than the true figure and, therefore, points up a significant problem. The $903,320.00 figure, therefore, represents an understated cost at The Grace Hospital—Northwest Unit per year.

Table 1

Earliest Day of Surgery

	Surgical Service*	1969 Entries	Deleted**	Omitted***	Selected	% Selected
Surgery	1	1,168	117	536	515	44%
Surgery	2	1,268	51	691	526	41%
Surgery	3	1,288	237	509	542	42%
Surgery	4	1,253	63	656	534	43%
Gynecology	1-4	1,776	15	1,445	316	18%
Children's Surgery	1-4	988	25	890	73	7%
Totals		7,741	508	4,727	2,506	
% of Total			7%	61%	32%	

*These classifications are used within the hospital for division of the Surgical Service.

**Deleted Cases: Hemorrhage, Abscess, Jaundice, Intestinal Obstruction.

***Omitted Cases: Those operated within six hours of admission, day of admission and first day after admission.

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[1] Professional Activity Study and Medical Audit Program, Commission on Professional and Hospital Activities, Ann Arbor, Michigan.

[2] The Grace Hospital—Northwest Unit, 450 beds, Detroit, Michigan.

Table 2
Selected Cases—Days of Earliest Surgery

Service	1969	Days After Admission 2nd*	3rd	4th	5th	6th	7th	8th	9th**	Total Patients
Surgery	1-3	346	192	121	113	49	30	42	154	1,057
Surgery	2	160	119	61	44	33	30	13	66	526
Surgery	4	156	108	71	37	20	32	17	93	534
Gynecology	1-4	126	75	32	23	24	12	1	23	316
Children's Surgery	1-4	30	16	6	7	3	3	1	7	73
Totals		818	511	291	224	129	116	74	343	2,506
% of Total		32%	20%	12%	9%	5%	5%	3%	14%	

*Second Day represents period 24 to 48 hours after the day of admission.
**Ninth Day and after.

Table 2 is a breakdown of the factors involved in the 2,506 patients. The conversion of the table to cost is accomplished as follows:

818 x 1 x $110.00 = $ 89,980.00
511 x 2 x 110.00 = 112,420.00
291 x 3 x 110.00 = 96,030.00
224 x 4 x 110.00 = 98,560.00
129 x 5 x 110.00 = 70,950.00
116 x 6 x 110.00 = 76,560.00
74 x 7 x 110.00 = 56,980.00
343 x 8 x 110.00 = 301,840.00
8,212 bed days $903,320.00

This can also be expressed in terms of surgical beds as follows:

$$\frac{8212}{365} = 22.5 \text{ beds}$$

$$\frac{22.5 \text{ beds}}{95.21\% \text{ of occupancy}} = 23.6 \text{ beds}$$

This means that if these waiting periods prior to surgery could be eliminated, the savings would theoretically be equivalent to adding 23.6 surgical beds. The estimated bed cost of constructing hospitals varies from $50,000 to $100,000 per bed, depending on the teaching and service facilities. If the minimum $50,000 figure is used, this would represent 1,180,000 for construction plus the annual cost of financing the capital expenditure.

The State of Michigan has 35,459[3] hospital beds with an 81.07%[4] occupancy. The average cost per patient in Michigan has increased from $85.39 in April of 1970 to $101.36 in April of 1971.[5] The amount of money involved (hospitalization only) is $\frac{22.5 \times 35{,}459 \times \$101.36}{450}$ = $80,985,119.60 per year. It would cost $109,450,000 for the State of Michigan to construct 2,189 beds.

$$\frac{22.5}{450} = \frac{x}{35{,}459} \qquad x = 1772.95$$

$$\frac{1772.95}{.81} = 2189 \text{ beds for the State of Michigan}$$

2189 x $50,000.00 = $109,450,000.00

It is assumed that the ratio of medical and surgical beds is a fairly constant figure throughout the state. It is recognized that a detailed study of each admission would change this amount and could conceivably reduce or increase the amount. However, it is to be remembered that 5,235 patients were dropped from the study before the above figures were computed. An attempt to determine the cause of the delay in each of the 2,506 cases is beyond the scope of this paper. Certainly the $80,985,119.60 and $109,450,000 figures are not exact, but an indication of the magnitude of the problem.

There are many reasons for delays which involve all segments of a hospital. The following list is far from complete:

1. The hospital administration finds it difficult to schedule all surgical patients each day. Their problems vary from the difficulty of staffing to the questionable custom of running operating rooms on a part-time basis.
2. Delays of several days occur because a surgeon is scheduled at another hospital. Some only operate twice a week and line the patients up as a matter of convenience. Large surgical services may constantly keep a backlog of patients awaiting their turn. I have encountered excellent surgeons who refuse to operate on Friday or Saturday.
3. The surgeons blame the internist and generalist for most of the delays. There was no detailed way of answering this question.

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[3] Michigan Department of Health Hospital and Medical Facilities Construction, 1970-1971.
[4] Hospital Administrative Services, 1971.
[5] Michigan Hospital, December, 1971.

However, I feel that a great deal of the wasted time is not of the surgeon's making.

In conclusion, it seems that most of the problem has arisen because of a failure to realize the magnitude of the financial cost to the public for each day of delay. A study of this kind serves many people. An annual excess cost of $80,985,119.60 to the people of the State of Michigan is worthy of the most careful examination.

It is suggested that a pre-admission service be created. In all non-emergency cases the patient would be asked to come to the hospital a few days before admission, when the routine and special laboratory work, X-rays, and history and physical could be done. These reports would be ready for addition to the chart on admission to the hospital. It is also felt that a well-run admitting service could complete the necessary work on an emergency and urgent admission in less time than presently used. At the present time very few charts contain all pre-surgical laboratory, X-ray and electrocardiographic reports on admission to the operating room. With a pre-admission work-up, patient care would improve with a decrease in cost to Blue Cross. The savings to Blue Cross, Medicare and other carriers could be tremendous. There would be a further savings to the "Blues" because the Blue Shield payment to a physician for the wasted pre-surgical days would be eliminated or markedly decreased. This would lead to an improved utilization and an increase in the available surgical beds. The cost of pre-admission programs has been fairly well explored.

Kaiser Permanente	—	$21.32*
Rhode Island	—	$54.00*
Check-up	—	$21.45**

A pre-admission service at Grace Hospital would cost about $200,000 for all of the surgical admissions (including those omitted from the study). If this were to eliminate all the questionable pre-surgical days, there would be a net saving of $703,320 per year for the Northwest Unit of The Grace Hospital. A pre-admission program would necessitate a change in the policy of the various carriers to accept these claims. Safeguards would necessarily have to be built in to eliminate fradulent use as a means of getting a free physical examination.

There is no implied criticism of any physician or hospital. It is felt that the costs and time factors at The Grace Hospital—Northwest Unit represent the average hospital. These figures are far below those of a university, veteran or closed hospital using interns and residents to do the bulk of the work. Costs have risen so high that we must find new ways of decreasing costs without sacrificing good medical and surgical care.

In summary, the use of an advance admitting service would theoretically result in:

1. A net saving of $703,320 per year for the Northwest Unit of The Grace Hospital.
2. A saving in bed space equivalent to 23.6 additional beds and an equivalent reduction in future capital expenditure of $1,180,000 plus the annual cost of financing the capital expenditure.
3. The arrival of the patient in the operating room with a chart containing all necessary and requested information.

Therefore, it is suggested that a pre-admission service be created with the help of Blue Cross and other carriers as a means of decreasing costs and hospital stay. A successful experience at the Northwest Unit of The Grace Hospital could theoretically be extended and result in a $55,420,053 net saving for the State of Michigan and a future capital expenditure of $109,450,000 for the equivalent bed space.

$$\frac{703{,}320}{450} = \frac{X}{35{,}459} \qquad X = \$55{,}420{,}053$$

Many consultations were held with Frederick W. Hyde, Jr., MD, Director of The Grace Hospital. His assistance and encouragement were of great value.

The assistance of Mrs. Elizabeth M. Sweet, RRA and Miss Ligia C. Hoyos, ART, Medical Record Department of the Northwest Unit of The Grace Hospital is acknowledged.

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*Kaebler, C. "Multiphasic Screening and Hospitals"—University of Microfilms Limited—Ann Arbor, Michigan.

**Check-up Corporation—Detroit, Michigan.

Perinatal Tips

By Paul M. Zavell, MD
Detroit

The following case from the files of the Wayne County Medical Society Perinatal Mortality Study Committee is presented as an aid in continuing education.

MATERNAL

This was the first pregnancy for a Gravida I, Para O (I) 18-year-old unmarried, white woman. She went to the obstetrical clinic of a small private hospital for prenatal care when three months pregnant. There, history, physical exam, urinalysis and VDRL were all normal or negative. However, her follow-up visits were irregular with appearances at five and six-and-a-half months respectively. Nothing unusual was noted.

At 38 weeks she presented herself in the emergency room with a history of eight hours of mild labor with cramps intermittently mixed with fairly good typical labor pains. There had been a sudden gush of blood-stained fluid followed by a slow but definite onset of frank bleeding. She then became frightened and went to the emergency room where she was examined by both her clinic obstetrician for the month and later by an obstetrical consultant. Fetal heart tones were 100-120/minute but regular.

Both obstetricians, after doing sterile vaginal examinations felt she was in true labor with probably a marginal sinus rupture but not true abruptio placenta or placenta praevia. She was put to bed rest after an X-ray showed the infant in "good position for delivery and of fair size."

Her Hgb. was reported at 16.0 gm. An IV of 5% G/W was started, type and cross match was drawn (she was O+) and appropriate amounts of the correct type of blood were found available if needed. In the next three hours labor became more regular but labor pains were still six to eight minutes apart. Examination revealed her to be partially effaced with one to two centimeters dilatation. The bleeding had not completely stopped and fetal heart tones were recorded ranging from 90 (on one occasion only) to 110-120.

During the next additional four hours labor pains did not improve, effacement and dilatation had not changed much and some increase of vaginal bleeding now seemed present. Fetal heart tones were recorded at 90-100 (with some irregularity).

Because of all this it was felt a C-section was now necessary. This was accomplished with some difficulty since the "infant's head was very low in the pelvis" and some tugging on the infant was necessary. The mother underwent the C-section without need for blood and otherwise after delivery of the infant she did well. A partial abruptio placenta was found at C-section.

FETAL

After birth by C-Section this five pound, eight ounce white infant appeared a little pale. She breathed irregularly, muscle tone was poor and heart rate was 90-100/minute. After naso-pharyngeal suction, emptying gastric contents by lavage, facial oxygen mask as well as mist with oxygen in a warmed incubator, color and muscle tone improved but cry was weak with a shrill note and heart rate remained about 100/minute. Respiration remained irregular in number and depth but averaged between 5 and 20/minute.

The infant was taken to the newborn nursery and placed in an Isolette. The clinic pediatrician for the month was not available immediately so that the obstetric intern (there was *no* pediatric intern on the service this month) examined the infant. However, he had had *no* training in pediatrics yet during his rotation. His physical exam noted poor lung aeration bilaterally but nothing more. He ordered a portable chest X-ray which 15 minutes later was reported by phone as "unsatisfactory due to poor exposure—but heart appeared large."

In the following hour the clinic pediatrician was contacted. He was "tied-up" at his office for the next several hours but by phone he felt the portable chest X-ray was of no significance and ordered a repeat X-ray. Since the infant's color was

(Continued on page 1014)

Doctor Zavell is chairman, Neo-Natal and Hospital Care Committee, Michigan Chapter, A.A.P., and chairman, Perinatal Mortality Study Committee, Wayne County Medical Society.

Perspectives on psychiatric aftercare in the community:

An effective Rehabilitation Program

By Edward A. Nol, MD
Southfield
Willie Fuller, MSW, ACSW

Abstract

In recent years, psychiatric hospitals have been developing aftercare programs designed to help former inpatients make a successful transition to community life. One such program employs private residences as "halfway houses," providing the patient with a family atmosphere through which he is reintegrated with society.

Evaluation of a particular "Family Care" program revealed that about 78% of the participants were successfully maintained outside of the hospital for six months, and that 40% of these "successes" were returned to the community. In addition, it was found that the ultimate disposition (hospital, home, community) of patients admitted to Family Care could not be reliably predicted on the bases of preadmission ratings of 11 variables (age, sex, first dose of psychoactive medication, and observed and "expected" ratings of mental, living, employment, and recreation status).

However, ratings of three variables (mental, living, and employment status) proved to be sensitive indicators of progress for patients participating in the Family Care program. Patients improving in these areas were most likely to be reintegrated with the community, while those worsening in these areas were most apt to return to the hospital.

* * *

For more than 15 years, the community mental health movement has stimulated the development of comprehensive treatment programs for the mentally or emotionally disturbed.[1-3] During this time, the role of the psychiatric hospital has gradually shifted from the provision of custodial care to the application of intensive, short-term therapy. This shifting of goals may be attributed to the frequent observations that, for many psychiatric patients, the hospital milieu itself is more debilitating than therapeutic, and that unnecessary hospitalization should therefore be prevented.[4] Spurred as well by the burden of increased patient loads and by the effectiveness of psychopharmacologic therapy, in the mid 1950's, psychiatric hospitals began to emphasize rapid treatment and discharge to the community.[5] Instrumental to the implementation of this new policy has been the development of the rehabilitative residence or "halfway house." Programs utilizing these aftercare "homes" are directed specifically toward helping former psychiatric inpatients become self-sustaining and functional members of their communities.[5,6]

At Pontiac State Hospital, such a shift in emphasis occurred several years ago. Until that time, the homes affiliated with our Family Care program provided patients with custodial care only —often for many years. Remuneration was the major concern of the sponsor or "home-owner," who did little more than regulate and restrict the patients. Moreover, there was inadequate contact between the Family Care staff and patients placed in the homes. However, as it became recognized that rehabilitation is a practical objective for many psychiatric inpatients, the Family Care program was considered in a new light. As a result, in 1963, the change from a custodial to a rehabilitative program began with the primary objective of providing psychiatric inpatients with a means to make a complete and uneventful transition from the protective hospital milieu to independent community life. Within four years, this attempt to restructure Family Care resulted in new goals, management philosophies, staffing, types of homes, patient selection procedures, expectations, and results.

Design of an Effective Family Care Program

Ostensibly, the patient referred to Family Care can function satisfactorily in the community, but does require some assistance and support in readjusting to an independent way of life. During his stay in the home, therefore, he will ideally re-

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quire minimum supervision. For this reason, Family Care is a flexible, semistructured program designed to respond to the individual and his needs.

Both psychiatrists and social workers administer and supervise the complete program. At weekly meetings, these staff members select new patients on the basis of a detailed review of their present mental status, prognosis, medication schedule, motivation, and availability for placement; they also evaluate the progress of patients participating in the program.

Upon placement in a home, the patient is generally referred to the Department of Vocational Rehabilitation for assistance in securing either employment or vocational training. In some cases, the social worker or sponsor may also assist the patient in locating a job.

While residing in a home, the patient is confronted with all of the routine activities and experiences of daily community living. He is responsible for maintaining a clean room, for purchasing his own clothes and personal necessities, for washing dishes and laundry, for transporting himself to and from work or school, and for selecting recreational activities to occupy his spare time (reading, games, socializing). Perhaps most importantly, he is called upon to cope with all of the normal strains and stresses of maintaining interpersonal relationships with the sponsor and his family, other patient-residents, as well as his employer and fellow employees.

For all practical purposes, the patient residing at a Family Care home is on his own. He receives whatever assistance and support he may require on request, but he is not under constant surveillance or supervision. The sponsor does not function in any professional capacity; however, since the family atmosphere of a Family Care home is much like that found in a private residence, the patient-sponsor relationship is highly supportive, often contributing significantly to the patient's social reintegration.

Once weekly, each home is visited by a psychiatric social worker who meets individually with the sponsor and each patient. The social worker assists with any readjustment problems or difficulties the patients may have. When necessary, he may conduct joint meetings with the patient and his sponsor, employer, or fellow patient-boarders, or with the patient's family as well. In addition, individual or group therapy is employed as required. The psychiatrist also sees each patient at regular intervals, primarily to re-evaluate medication schedules, assess patient progress, and assist with the more serious and difficult problems. If the patient's transition is effective and relatively uneventful, he may be discharged for a return to the community within six months.

Evaluation of Family Care

The Pontiac State Hospital Family Care Program has maintained a 75% success rate; that is, three-quarters of the patients participating in the program have eventually been discharged to the community without rehospitalization. We recognize, however, that certain adjustments in our program might be useful and, therefore, we have constantly re-evaluated our objectives, conditions of the homes, patient-sponsor and patient-staff relationships, work and educational programs, and administrative policies. For example, we recently assessed the program's effectiveness, and also attempted to determine whether we could predict more objectively the types of patients who would most benefit from Family Care. Specifically, we were interested in learning whether preadmission ratings of certain variables were predictive of the patients' final disposition (hospital, home, community). The 11 variables we investigated in this regard were age, sex, first dose of psychoactive medication, and observed and "expected" ratings of four performance areas.

Method and Material: Ratings of the four performance areas (Mental, Living, Employment, Recreation) were made according to the original General Adjustment and Planning Scale (GAPS) developed by Walker and Frost.[7] Mental status was assessed by the psychiatrist, and the remaining three variables, by the social workers. The patients' current status in the four areas were rated at each evaluation period (pretrial; months 1, 3, 6) throughout the six-month duration of study. Individualized six-point rating scales were employed to assess each area. These scales allowed for evaluations ranging from "complete independence or normal" (1) to "complete dependence or markedly abnormal" (6).

Since we wanted to evaluate the program as it functioned routinely, homogeneity of our patient sample was not attempted. We admitted 49 psychiatric patients to the study; these constituted 35 schizophrenics and 14 nonschizophrenics—23 men and 26 women, aged 16 to 58 years (mean age, 32 years). Since maintenance drug therapy is essential for symptom control, all patients were receiving a phenothiazine tranquilizer (thioridazine*) upon their referral to Family Care. In our experience, thioridazine produces few side effects that might complicate the progress of ambulatory patients and, therefore, we continued treatment with this agent for most patients throughout the study.

Results: When the ratings of the four GAPS areas were completed at month six, we collated all data for analysis. Patients were separated into three groups according to their final disposition.

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*Mellaril®, Sandoz Pharmaceuticals

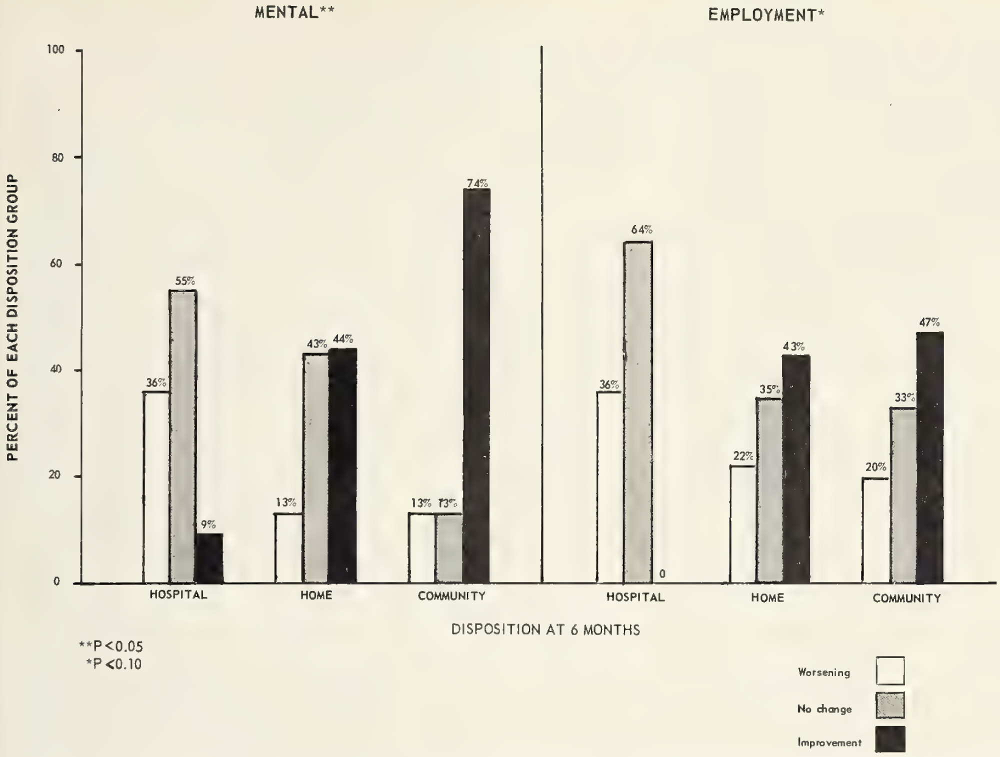

FIGURE 1: Patient response in Mental and Employment Ratings of GAPS—the percentage of patients showing worsening, no change, or improvement according to their disposition (Hospital, Home, Community).

The first group comprised 11 patients (three men and eight women) who were returned to the hospital, the second group comprised 23 patients (14 men and nine women) who were retained in homes, and the third group comprised 15 patients (six men and nine women) who were discharged to the community; the mean ages of these groups were 30, 31, and 36 years, respectively. According to the demographic data, the success rate or percent of patients maintained outside of the hospital (78%) was considerably higher for men (87%) than for women (69%). In addition, the average age of the community group (36 years) was greater than that of the home group (31 years) or the hospital group (30 years).

Statistical analysis further revealed that the 11 variables assessed pretrial (age, sex, first dose of psychoactive medication, observed and "expected" performance in the four GAPS areas) were not predictive of the patients' final disposition (hospital, home, community) since there were no significant correlations between any of the variables and any of the three disposition classes. In reexamining these data from another vantage point, we established only two disposition classes—failures (hospital) and successes (home and community). Although our ultimate objective is to return all patients to the community, we cannot consider those patients who remain in a home as program failures. Their ability to function satisfactorily outside of the hospital is, in fact, an indication of successful adjustment. A reordering of the data along these lines, however, revealed no significant improvement in the predictive value of the 11 variables.

Subsequently, we analyzed the data to determine how sensitive the GAPS ratings were as measures of adaptation or progress. We examined each performance rating individually for possible correlations between the patients' degree of improvement throughout the six months of treatment and their final disposition (hospital, home, or community). Accordingly, we observed that the degree of improvement in three of the four ratings (mental, employment, and living) corresponded significantly ($p<0.05$ or better) to the final disposition of patients (**Figures 1 and 2**). That is, patients improving in these three areas were more apt to remain in the home or reenter the community, while patients worsening in these areas were more likely to return to the hospital.

We then examined the dosage schedules of those patients treated with thioridazine throughout the entire six-month study, to see whether 1) change in the GAPS areas and 2) the patients' ultimate disposition were related to daily dosages of thioridazine. This analysis revealed that the community group was receiving less drugs at the end of the study (mean 273 mg/day) than it did at the start (mean, 330 mg/day). On the contrary, the failure group was receiving more drug post-trial (mean,

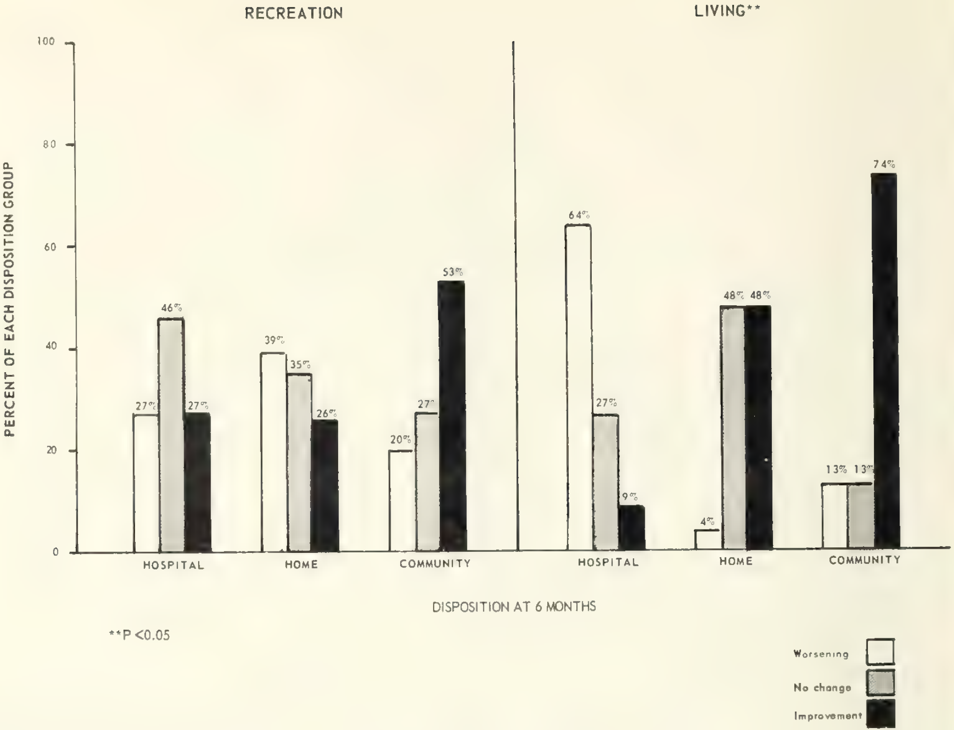

FIGURE 2: Patient response in Recreation and Living Ratings of GAPS—the percentage of patients showing worsening, no change, or improvement according to their disposition (Hospital, Home, Community).

329 mg/day) than it did pretrial (mean, 221 mg/day). The home group received intermediate dosages of thioridazine both pretrial (mean, 324 mg/day) and post-trial (mean, 281 mg/day). As might be expected, patients who progressively improved throughout the study received decreasingly smaller doses of thioridazine, while patients who progressively worsened received increasingly larger doses.

The Role of Psychopharmacotherapy

Psychoactive drug therapy is an indispensable facet of our program, and we, like others involved in psychiatric aftercare,[8-10] have been most impressed with thioridazine. This phenothiazine tranquilizer reliably produces effective control of symptomatology with minimal untoward effects.[8-10] While the occurrence of some side effects (extrapyramidal stimulation, lethargy, photosensitivity) may not threaten the course of the hospitalized patient, these same reactions in the outpatient may compromise drastically his progress in an aftercare program. The occurrence of such untoward effects, however, is minimal with thioridazine treatment; as a result, such treatment may contribute immensely to the successful rehabilitation of the psychiatric patient. With an ideal combination of sedative and tranquilizing effects, thioridazine is well tolerated by the patient, and the psychiatrist can make dosage adjustments with confidence.[8]

Treatment with thioridazine is also a useful adjunct to and a facilitator of supportive psychotherapy. Benefits of such drug treatment help 1) maintain the favorable results obtained during the patient's hospitalization, 2) reinforce the patient's motivation to persevere in treatment, and 3) normalize the patient's functioning in the community.[8-12] Most importantly, these predictable effects of thioridazine instill a confidence in the psychiatrist which he, in turn, conveys to the patient. Thus, both the patient and the psychiatrist feel comfortable with thioridazine treatment, and maintenance therapy can be successfully sustained for as long as necessary. Such therapy with thioridazine not only helps to ensure a safe and effective transition from hospital to community, but also prevents relapse and rehospitalization.[8,9,11,12]

Commentary

At the present time, it is generally recognized that the extent of a psychiatric patient's response to any given therapeutic or rehabilitative program cannot be reliably predicted. Although many investigations have been conducted with the hope of finding some predictive equation that might allow the determination of responders and nonresponders prior to therapeutic efforts, to date few positive results have been obtained. In some instances, certain individual variables (marital status, area of residence, school experience, diagnosis) have been found indicative of therapeutic response, but in no case has a reliable predictive equation been derived.[13-15]

In our study, we too were unable to correlate pretrial ratings of certain variables (age, sex, first dose of psychoactive medication, and observed and "expected" ratings of patients' mental, employment, recreation, and living states) to the patients' ultimate disposition. We infer, therefore, that preadmission assessments of these variables do not lend themselves to predicting the fate of patients accepted into our program. We did, however, find that three of the four GAPS items were sensitive indicators of patient progress, since patients improving in mental, living, and employment status were most apt to return to the community.

Analysis of the dosage schedudes for those patients treated with thioridazine for the entire six months, showed only that patients improving throughout the trial received decreasingly lower daily doses, while those worsening throughout the trial received increasingly higher daily doses. It should be noted, however, that the average daily dosage of these patients returned to the hospital after six months was only 329 mg, or less than one-half of the maximum recommended therapeutic dose for psychotic patients. It is conceivable, therefore, that the optimal therapeutic dose was achieved in those patients who improved throughout the study, but was not achieved in those who worsened.

Looking at our program in its totality, we substantiated our earlier claim of a 75% success rate; in our study, 78% of the patients were successfully maintained outside of the hospital for six months and, of these, 40% were discharged to the community. Moreover, since we evaluated our program in 1967, the patients' average length of stay in a home has decreased from six to three months. We are convinced, therefore, that such programs as Family Care play an important role in the rehabilitation of psychiatric patients. Family Care plus the use of maintenance psychopharmacotherapy in the home and in the community, can make the transition from hospital to community a relatively uneventful and successful experience; they can render the patient more capable of readjusting to the "outside world" and less likely to require rehospitalization. Moreover, programs such as Family Care may also play an important role in community psychiatry by obviating the need to hospitalize many psychiatric patients. Some patients may be referred directly to Family Care for immediate treatment and rapid reintegration with the community. We have already started to experiment in this area and, to date, our experience has been rewarding. Presently, about 10 to 20% of the patients in Family Care are referred from sources other than the inpatient facility. One might anticipate, therefore, that such community-oriented mental health programs as Family Care will play an important "preventive" as well as rehabilitative role in the future of the mental health movement.[9]

Acknowledgements

For their assistance in rating patient progress, we extend our appreciation to the following Family Care social workers: Jack Bellairs, Wilma Dunlap, John Howard, and Nancy Hunt.

References

1. Simon, A.: Community Mental Health Services. *California Med.* 114: 35-36 (January) 1971.
2. Mental Health Hostels. *Brit. Med. J.* 1: 552-553 (June 6) 1970.
3. Zusman, J.: Community Psychiatry in 1970—Some Successes and Failures. *Psychiat. Quart.* 44: 687-705, 1970.
4. Spensley, J., et al: LPS and the Mental Health Center. *California Med.* 114: 49-51 (January) 1971.
5. Richmond, C.: Expanding the Concepts of the Halfway House: A Satellite Housing Program. *Int. J. Soc. Psychiat.* 15: 96-102 (Spring) 1970.
6. Weiss, B. S. et al: The Uninvolved: A Study of Services for Former Mental Patients. *Int. J. Soc. Psychiat.* 15: 223-229 (Summer) 1969.
7. Messier, M. et al: A Follow-Up Study of Intensively Treated Chronic Schizophrenic Patients. *Amer. J. Psychiat.* 125: 1123-1127 (February) 1969.
8. Manizade, A.: The County Mental Health Center and its Role in Community Psychiatry. *Maryland State Med. J.* 16: 49-51 (September) 1967.
9. Kafi, A.: The Use of Thioridazine in a Comprehensive Mental Health Program. *Michigan Med.* 68: 1033-1036 (October) 1969.
10. Kirby, J. H.: The Discharged Mentally Ill Patient: Aftercare and Maintenance in the Community. *Med. Times* 97: 127-132 (June) 1969.
11. Pasamanick, B. et al: Home vs. Hospital Care for Schizophrenics. *JAMA* 187: 177-181 (January) 1964.
12. Wright, G.: The Treatment of Non-Hospitalized Schizophrenics. *Amer. J. Psychiat.* 119: 261-262, 1962.
13. Parnell, R. W. and Skottowe, I.: Length of Stay in Mental Hospitals and Some Factors Influencing It. *Brit. Med. J.* 2: 1296-1300 (December) 1959.
14. Fulton, J. R. and Loret, T. W.: Predicting Length of Psychiatric Hospitalization from History Records. *J. Clin. Psychol.* 23: 218-221 (April) 1967.
15. Watson, C. G.: Prediction of Length of Hospital Stay from MMPI Scales. *J. Clin. Psychol.* 24: 444-447 (October) 1968.

fair (although a little pale) in oxygen and respirations were now 20-40/minute (though irregular in rate and depth) he felt the regimen of oxygen and mist, Isolette with heat and suction prn was satisfactory for the present.

The infant's general condition did *not* improve however in the Isolette. Rather, several short apneic spells were now noted, respiratory rate had now climbed to 60-80/minute and respirations were irregular and shallow. Heart rate climbed to about 120/minute.

About five hours after birth the infant was seen by the clinic pediatrician. He noted some paleness of color, heart rate of 120-150 and shallow irregular respirations (60-120/minute). The infant's liver was felt to be slightly enlarged. His diagnosis was "probably a congenital heart problem in very early failure (despite lack of cyanosis, normal heart rate and rhythm)."

The chest X-ray ordered previously revealed "heart at upper limits: the liver seems prominent and lungs a little hazy in appearance." The CBC showed Hgb.=10.5 gm., Hct.=32, WBC 15,200, PMN=40, Bds=03, Lymph 56, Eos 01.

Cord Blood was A+ direct Coombs and ABO negative. After reading the X-ray report the pediatrician added to his original diagnosis "mild respiratory distress." However, he felt no specific treatment but "supportive" and observation were needed. No new orders therefore were written. During the next six and a half hours the infant was not seen by any physician but the nursery nurses notes record "repeated mild apneic spells and pale appearance, some occasional mild twitching of all extremities." The infant at about 11-12 hours of age had a mild prolonged convulsion and was very pale in appearance. Within a few minutes, before any doctor arrived she expired.

An autopsy was done that revealed subarachnoid hemorrhage and subcapsular hemorrhage of the liver but both heart and lungs were normal.

PERINATAL COMMITTEE COMMENTS

1. The Committee felt the obstetrical care after the patient came to the emergency room was good. The use of a consultant when there is any doubt present and allowing a trial of labor when there is not undue dangers to both mother and infant were both justified. Recognition of the need for a C-Section soon enough is also commended (despite the ultimate poor outcome in this particular case).
2. It is felt there was apparent neglect on the mother's part in her failure to receive monthly prenatal visits both sooner than she did and then at regular intervals thereafter.
3. There is no real justification for permitting a newborn infant having respiratory and shock-like symptoms to receive inexpert care. If a trained pediatric intern is not available someone with expertise in handling a newborn and his problems should be immediately available.
4. A hemoglobin value of 10.5 gm. and an enlarged liver should have alerted one to the possibility of hemorrhage (i.e., possible hemorrhagic disease of the newborn). The use of Vitamin K and possibly a blood transfusion should have been considered.
5. Other diagnoses that could have been entertained during life were aspiration pneumonia sepsis, intracranial hemorrhage, hypoglycemia and tetany of the newborn.

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Statement required by the Act of October 23, 1962; Section 4369, Title 39 of the United States Code showing the Ownership, Management and Circulation of Michigan Medicine, published four times in January and three times in all the other months, 37 issues, mailed at East Lansing, Michigan, and additional post offices in Ingham County for December 1, 1972.

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Reversible pulmonary thrombosis associated with combination antiovulants

By Robert T. Lyons, MD
John H. Libcke, MD
Katikuti E. Dutt, MD
Pontiac

Synopsis—Abstract

Thrombo-embolic complications associated with oral contraceptive agents have been described in a wide variety of clinical settings, but until the work of Irey, et al., it was not appreciated that a distinctive histologic vascular lesion was present in many of these cases. The authors have recently seen an additional case at autopsy in which typical lesions were present and which alerted them to early diagnosis and successful treatment in two subsequent cases. Each of these women was taking combination antiovulants. Two of the three patients gave a history of recurrent severe headaches and two were considerably overweight.

The fact that discontinuance of the antiovulants and treatment with anticoagulants resulted in survival of two patients suggests that this lesion can be reversible. The prolonged clinical course of the first and third cases suggests that there may well be time to diagnose and successfully initiate treatment if these pulmonary lesions are recognized.

Introduction

Thrombo-embolic complications associated with oral contraceptive agents have been described in a wide variety of clinical settings including pulmonary thromboembolism, cerebral venous and dural sinus thrombosis, coronary artery thrombosis, mesenteric vessel thrombosis, Budd-Chiari syndrome and retinal vessel lesions. Evidence has also been presented to statistically refute such claims.[1,2] Until the work of Irey, et al.,[3] it was not appreciated that a distinctive histologic vascular lesion was present in many of these cases. More recently vascular lesions have been described in surgical specimens from women receiving oral contraceptives.[4] We have recently seen an additional case at autopsy in which typical lesions were present and which alerted us to early diagnosis and successful treatment in two subsequent cases.

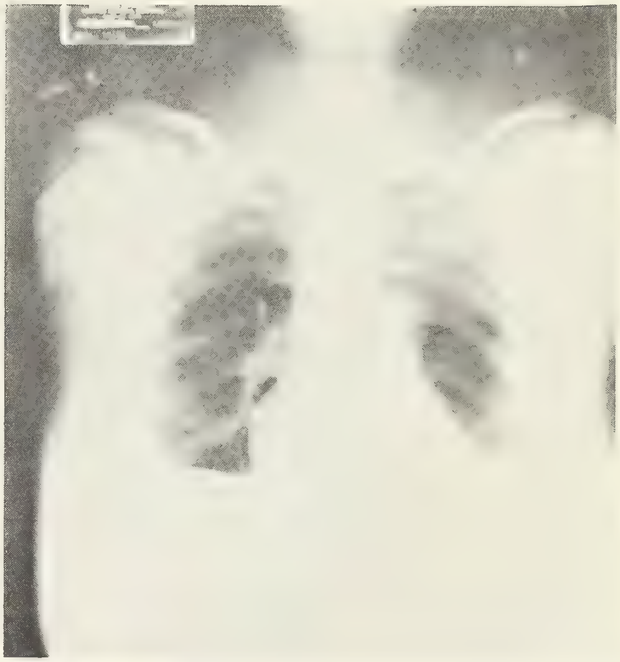

Figure 1. Chest X-ray of the first case. A left upper lobe lesion is seen.

Case 1:

This 44-year-old housewife of Armenian descent was admitted on January 10, 1970 with the chief complaint of progressive dyspnea, cough and chest pains of eight weeks duration. She had been seen and treated by a physician for bronchitis on several occasions during her illness. She came to the emergency room and when seen appeared acutely ill and orthopneic. Temperature 97° F., pulse 140, respiratory rate 30. Chest X-ray (**Figure 1**) revealed an infiltrate in the left upper lobe. EKG revealed non-specific ST segment and T-wave changes and tachycardia. White blood cell counts ranged from 12,000 to 18,000 with a slight shift to the left. Her course remained febrile with temperature elevations up to 102° F. with cough and dyspnea. PPD was strongly positive, and although sputum smears were negative, tuberculosis was strongly suspected.

Antituberculosis treatment was instituted and arrangements were made for further study and treatment. However, just before transfer she suddenly collapsed and expired while returning to bed from her bathroom.

History obtained on admission revealed that she had been taking a combination antiovulant for the previous four years for birth control. She also

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The authors are associated with the Departments of Medicine and Pathology at Pontiac General Hospital.

Figure 2. Microscopic section of small pulmonary artery branch. Papillary projection secondary to proliferation of endothelium and intimal connective tissue.

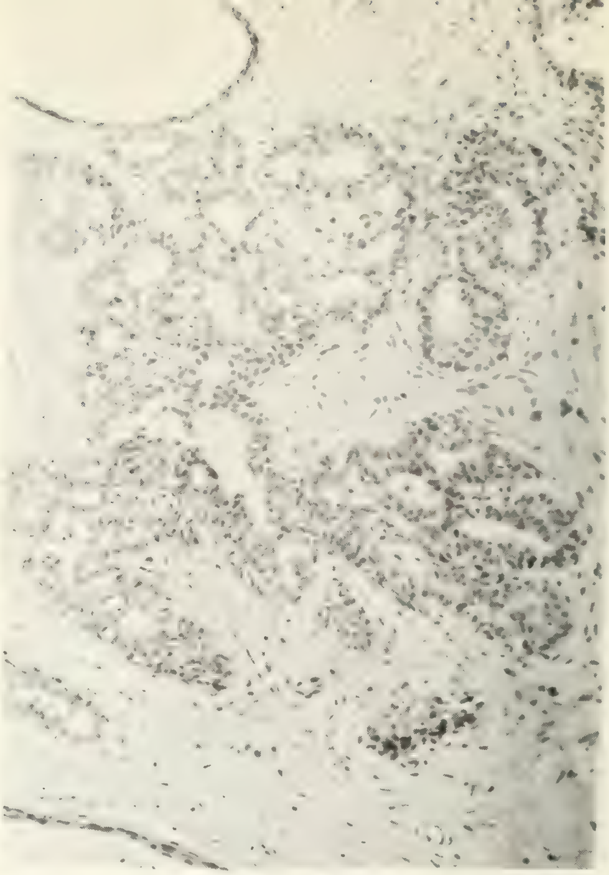

Figure 4. Microscopic section of endocervix showing atypical glandular hyperplasia. (Hematoxylin and eosin; original magnification, x100.)

had a history of severe intermittent headaches of 12 years duration. There was no history suggestive of pelvic disease or peripheral thrombophlebitis. The antiovulant was discontinued on the day of admission. The type will be considered later.

Gross autopsy findings: There were large thrombi within the pulmonary trunk and extensions of these thrombi into the peripheral branches of the pulmonary arteries. The vascular lesions were associated with multiple foci of atelectasis and dark red congestion. The left upper lobe contained a 3 x 4 x 4 cm. irregular firm area which on section had a mottled yellow-gray surface with no evidence of calcification or reaction of the overlying pleura. The gross autopsy otherwise revealed only acute passive visceral congestion and rib fractures secondary to resuscitative efforts. There were no significant atherosclerotic changes in either aorta or pulmonary arteries.

Microscopic findings—Lungs: Multiple sections from all lobes revealed a wide variety of changes. The firm area in the left upper lobe was found

Figure 3. Microscopic section of pulmonary artery. Arterial wall in lower left with organized vascularized base of thrombus in center. Above this is a partially organized layer of thrombin and finally a fresh unorganized thrombus. (Hematoxylin and eosin; original magnification, x40.)

to be an infarct characterized by extensive coagulation necrosis and surrounded by organization, fibrosis, and focal cuboidal metaplasia of alveoli and terminal air spaces. Hemosiderin deposition and capillary proliferation was also seen. The overlying pleura showed reactive granulation tissue and evidence of focal adhesions. No granulomata were seen. Sections from other portions of lung parenchyma showed moderate acute passive congestion and mild to moderate alveolar distention. There was no evidence of acute or granulomatous inflammation and the bronchi were unremarkable.

The changes of greatest significance were found in the vessels and were of two varieties. The first change was noted in smaller peripheral arteries (**Figure 2**) and consisted of focal thickening of the subintimal portion of the vessel by loose myxoid tissue containing small numbers of fibroblasts. These nodules projected into the vessel lumens as small hillocks or polypoid structures. They were in general localized to one small segment of the intima. No fibrin or thrombotic material was associated with any of these lesions. The other type of lesion was noted within the main branches of the pulmonary arteries (**Figure 3**) and consisted of similar changes within the intima complicated by large masses of thrombotic material. The latter were organized into three layers, the innermost consisting of granulation-like tissue containing large amounts of hemosiderin. The second layer was one of fibrin and occasional fibroblasts and the third layer was the largest, consisting of recent amorphous thrombotic material. The latter occluded most of the vessel lumen.

Uterus: The endometrium was relatively atrophic, containing occasional cystic glands and others with low inactive epithelium. The myometrium contained numerous glandular structures surrounded by typical endometrial stromal cells. A section of cervix revealed moderate acute inflammation and focal polypoid hyperplasia of endocervical mucosa with many of the glands appearing back to back and showing bridging (**Figure 4**). A section of ovary showed multiple corpora albicantia and several small germinal inclusion cysts.

Sections from other organs showed only acute passive congestion.

Comment: Autopsy revealed massive thrombi occluding the major branches of both pulmonary arteries. No source of emboli was found within the pelvic or leg veins and because of the histology of the masses within the pulmonary arteries, it is felt that they arose in this location. In addition, focal intimal change was noted in many other pulmonary arteries and it is postulated that these formed the basis for the more massive occlusive thrombi in the main pulmonary arteries.

Most of the thrombotic material was amorphous and of recent origin. This suggests that although there were changes going on within the pulmonary vessels over several months, including one discrete infarct, the terminal event was precipitated by the sudden deposition of a large amount of fibrin over the previously established base in the endothelium. It is of interest that this patient also had the type of endocervical hyperplasia that has been associated with oral contraceptives.[5]

Case 2:

This 49-year-old Caucasian housewife was admitted on February 12, 1971 with the chief complaint of headaches and weakness of the left side of her body. Six hours prior to admission, she noted the onset of severe pulsating right temporal headache with nausea and vomiting. When, several hours later weakness of the left upper and lower extremities occurred, her family brought her to the Emergency Room. History revealed episodes of pulsating headaches dating back to her teens. They had been labelled as migraine. Her menses were regular but excessive for the past year. She denied medications and drugs. When examined on admission, she appeared drowsy and confused. Blood pressure 130/70, pulse 62, temperature 97° F., respiratory rate 20. Her left pupil was slightly larger than the right but both reacted to light and accommodation. Her neck was supple. Extraocular movements and fundi were normal. There was a left lower facial weakness. The tongue did not deviate on protrusion. Motor examination showed spasticity and weakness of the left upper and lower extremities. Deep tendon reflexes were increased on the left and a Babinski reflex was present on that side. Sensory function was intact. The lower abdomen revealed a firm mass about the size of a three month pregnancy, which on pelvic examination was felt to be a large fibroid uterus.

Complete blood count showed a white cell count of 13,000, hemoglobin 10.5 gms. with hypochromic red cells. SMA-12, electrolytes and EKG were normal. Urinalysis revealed many red cells (menses). Spinal fluid appeared normal and the protein was 18 mgm. There were 17 RBCs, one poly, one lymphocyte. EEG was abnormal showing slow wave activity over the right temporo-parietal area. Chest X-ray (**Figure 5**) was normal as was the EKG. Brain scan showed a small abnormal concentration of contrast material within the right temporo-parietal region which was felt to represent an infarct. This patient's progress was good and with physiotherapy she was soon able to walk with a cane. On March 3, 1971, 17 days after admission, while in the bathroom she noted sudden dyspnea with anterior chest pain and weakness. EKG revealed a tachycardia of 140 per minute with an axis shift to the right (**Figure 6**).

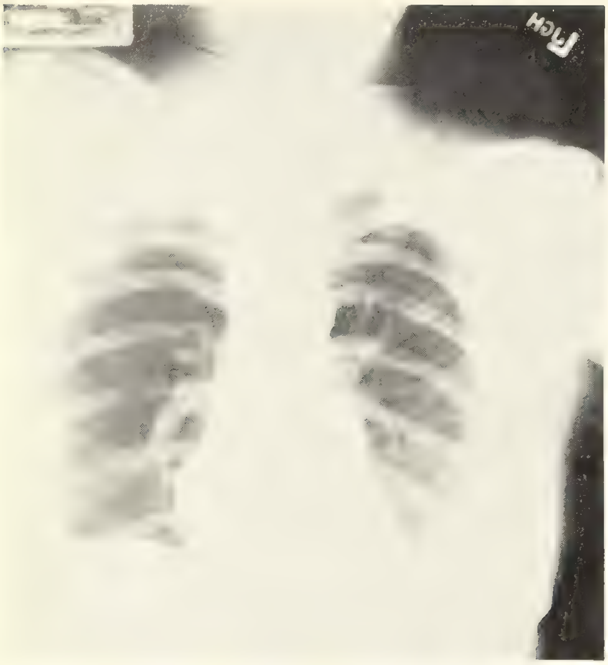

Figure 5. Chest X-ray of Patient #2. Taken 2-13-71.

Heparin and Coumadin were begun immediately and within 48 hours the EKG reverted to its initial appearance (**Figure 7**) and a loud pleuropericardial friction rub was heard over the precordium. Because of this occurrence, the patient was asked directly whether she was taking birth control pills and she produced one from her purse stating that she had been taking them for the past year for control of her excessive menses. Lung scan the following day is shown revealing multiple areas of reduced perfusion (**Figure 8**). Subsequent course was uneventful and she was discharged on maintenance Coumadin. She has had no further respiratory or chest disturbance as of this date.

Case 3:

History: 44-year-old white housewife was admitted to Pontiac General Hospital on December 27, 1971 with a history of progressively increasing dyspnea, palpitations, and recurrent hemoptysis of one week duration. The patient was also a bus driver and was leading an active life until this illness. There was no history of hypertension, diabetes mellitus, rheumatic fever or myocardial infarction in the past. Examination revealed an

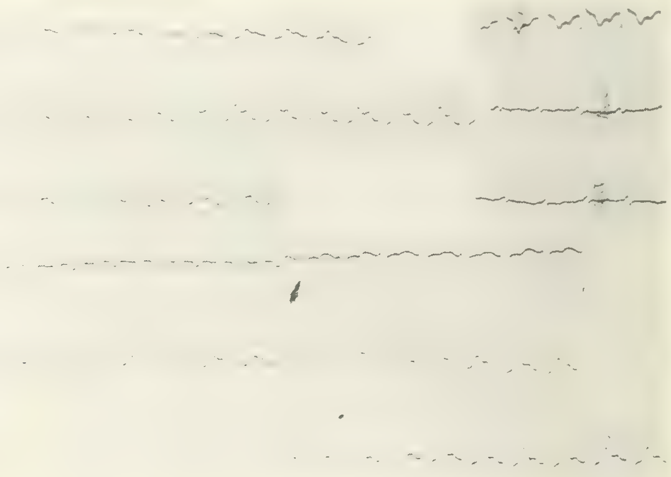

Figure 6. EKG of Patient #2. Taken 3-3-71 after acute episode of dyspnea and chest pain, showing marked change in axis to the right.

Figure 7. EKG of Patient #2. Taken 3-5-71, two days after thromboembolism. Interpreted as reverting to normal.

obese white female, height five feet, eight inches, weight 250 pounds. Blood pressure 114/90 mm. Temperature 99° F.; pulse 108/min.; respiration rate 30/min. Jugular vein engorgement was noted. Heart borders were slightly enlarged and the sounds were normal. No gallop or murmurs were noted. Bilateral coarse basal rales were present. The abdomen was very protuberant. 4+ pitting edema of the lower extremities was present but no calf or thigh tenderness were present. Homan's sign was negative. Complete blood count: WBC 8,800, RBC 4.80m with a differential of 75 segs, 17 lymphs, 2 bands, 4 monos, 2 eosinophils. Hemoglobin 14.4 gms, hematocrit 43.4, M.C.V. 90, platelets normal numbers. Serum electrolytes were normal. Serum albumin was 2.3 gm. with a total protein of 6.7 gm., LDH 300. Urinalysis: Albuminuria and a few WBCs per high power field. LDH isoenzymes were normal. Chest X-ray revealed congestive changes in both lung fields as well as a minimal pleural effusion at the left lung base. Cardiomegaly was present. Lung scan revealed large perfusion defects along the superior half of the posterior medial contour and the posterolateral aspect of the base of the right lung. Another area of reduced perfusion was noted within the left lung base posteriorly. The pattern was considered compatible with pulmonary embolization. EKG showed non-specific ST-T wave changes.

The patient was treated with routine therapy (digitalis, diuretics, and sodium restriction) for congestive heart failure and also anticoagulated initially with Heparin and later Coumadin. She lost 38 pounds in 13 days. Repeat chest X-ray 10 days later showed resolving congestive changes with disappearance of the left pleural effusion. Patient was discharged two weeks after admission on continuing anticoagulant therapy. She has been followed in the clinic to date and has remained asymptomatic (May 8, 1972).

In view of our past experience, it is our impression that this patient had congestive heart failure secondary to recurrent pulmonary emboli. There was no other discernible cause for her congestive heart failure and the patient improved rapidly with digitalis, diuretics and anticoagulant therapy. The anticoagulant therapy will be continued for another six months.

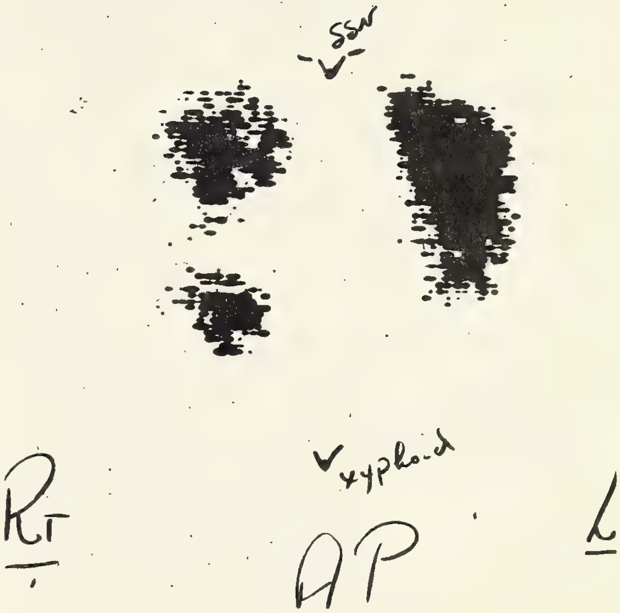

Figure 8. Lung scan of Patient #2. Taken 3-5-71. Shows decreased uptake over right middle and lower lobe and left lower lobe.

Discussion

Each of these women was taking combination antiovulants, lending further support to Irey's assumptions that these lesions are associated with the combination of estrogen and progesterone. The first and fatal case was taking Norethindrone 2 mgm. and Mestranol .10 mgm. The second was taking Ethyndial diacetate 1 mgm. and Mestranol .10 mgm. The third case was taking Norethindrone 1 mgm. and Mestranol .08 mgm. At the time of diagnosis of thromboembolism two were at the end of their cycle. The third or fatal case was in the withdrawal period at the time of the fatal episode.

Two of three patients gave a history of recurrent severe headaches treated by physicians in the past. As noted by others, this history should continue to be contraindication to the use of antiovulants. Two of three patients were considerably overweight and all were over 40 years of age. Of interest, is the fact that their taking the pill for a period of four years, one year and two and a half years respectively is considerably longer than that reported in Irey's series.

There is as yet no complete or acceptable explanation of the pathogenesis of the unique, and probably idiosyncratic, vascular lesion seen in patients on oral contraceptives. Nor is there an explanation for the preponderant involvement of pulmonary vessels. Possible explanations would include the recognized effects of estrogenic materials on the mucopolysaccharide ground substance of the intima where the initial lesion forms.[6] These increased amounts of mucopolysaccharide are then associated with proliferation of intimal fibroblasts leading to the early lesion described by Irey. Direct effects of oral antiovulants on the media of endometrial arterioles have also been reported in about one third of women studied.[7] Changes in the intravascular coagulation-fibrinolytic systems may also be presumed. Although data on the influence of these drugs on clotting factors are somewhat contradictory, a recent report shows an increase in spontaneous fibrinolytic activity in women receiving oral contraceptives.[8] There were fluctations in the level of activity with a marked decrease in activity during the week of drug withdrawal. It is possible that this disturbance of coagulation-fibrinolysis equilibrium is related to the sudden massive deposition of fibrin on the basic intimal lesion. It is of further interest that the fluctuations in activity were most pronounced during the first year of drug usage; the same period during which most of Irey's fatal cases occurred.

The striking predilection of pulmonary vessels for this type of lesion may be the result of metabolic peculiarities combined with the large endothelial surface area produced by a recently described ultrastructural meshwork of irregular projections.[9]

The fact that discontinuance of the antiovulants and treatment with anticoagulants resulted in survival of two patients suggests that this lesion can be reversible. The prolonged clinical course of the first and third cases suggests that there may well be time to diagnose and successfully initiate treatment if these pulmonary lesions are recognized.

References

1. Zimmerman, TS, Adelson, L, Ratnoff, OD: Pulmonary embolism and unexpected death in supposedly normal persons. *N Engl J Med* 283:1504-1505, 1970
2. Drill, VA: Oral contraceptives and thromboembolic disease. *JAMA* 219:583-592, 1972
3. Irey, NS, Manion, WC, Taylor, HB: Vascular lesions in women taking oral contraceptives. *Arch Path* 89:1-8, 1970
4. Blaustein, AU, Shenker, L: Vascular lesions associated with use of oral contraceptives. (Abst.). *Ann Intern Med* 74:817, 1971
5. Taylor, HB, Irey, NS, Norris, HJ: Atypical endocervical hyperplasia in women taking oral contraceptives. *JAMA* 202:637-639, 1967
6. Schiff, M, Burn, HF: The effect of intravenous estrogens on ground substance. *Arch Otolaryng* 73:43-51, 1961
7. Blaustein, AU, Shenker, L: Responsiveness of endothelium in spiral arterioles of endometrium. *Obstet Gynec* 35:12-20, 1970
8. Hedlin, AM, Monkhouse, FC: Changes in spontaneous fibrinolytic activity during use of oral contraceptives. *Obstet Gynec* 37:225-232, 1971
9. Smith, U, Ryan, JW, Michie, OD, Smith, DS: Endothelial projections as revealed by scanning electronmicroscopy. *Science* 173:925-927, 1971

MICHIGAN
DEPARTMENT
OF PUBLIC
HEALTH

Monthly Surveillance Report

Cases of Certain Diseases Reported
To the Michigan Department of Public Health
For the Four-Week Period Ending Oct. 27, 1972

	1972 This 4-Week Period	1971 Same 4-Week Period	1972 Total To Above Date	1971 Total Same Date	Total Cases for 1971
Rubella	33	90	1,313	2,769	2,955
Congenital Rubella Syndrome	0	0	0	1	1
Measles	45	82	2,038	2,427	2,659
Whooping Cough	19	22	100	124	140
Diphtheria	0	0	1	0	1
Mumps	146	177	2,886	9,749	10,748
Scarlet Fever & Strep Sore Throat	991	635	9,508	9,115	11,244
Tetanus	0	0	1	2	7
Poliomyelitis (paralytic)	0	0	0	0	0
Hepatitis	351	324	3,574	4,007	4,828
Salmonellosis (other than S. typhi)	61	42	679	570	691
Typhoid Fever (S. typhi)	1	1	7	7	10
Shigellosis	48	38	491	197	295
Aseptic Meningitis	50	45	201	191	239
Encephalitis	10	2	82	93	108
Meningococcic Meningitis	4	3	44	57	64
H. Influenza Meningitis	5	5	64	67	82
Tuberculosis	122	158	1,398	1,573	1,824
Syphilis	376	417	4,003	3,675	4,689
Gonorrhea	2,148	2,045	19,982	17,914	22,115

Information can be supplied by the local health department on the local incidence of disease.

Maurice Reizen, M.D., Director
Michigan Department of Public Health

Tuberculosis — changing concepts

In submitting this article, the author observes:

"(There is) continued emphasis on the ambulatory treatment of active tuberculosis with little or no regard to the sputum status of the infected person . . . such theories are frequently based upon references and publications of public health agencies. (This article) represents a word of caution and of clarification to those who may not be familiar with the facts and potential hazards of some of the more recent theories of ambulatory treatment.

By Chester S. Koop, MD
Traverse City

During each of the past several decades, there has been a gradual change in many of the concepts about tuberculosis. Most of such concepts pertained to the most effective therapy available at the time and diagnostic techniques. The present decade continues to reveal our changing concepts in both treatment and prevention of the disease. Consequently, as changing concepts become publicized, they are quite naturally accompanied by some difference of opinion and outright disagreement.

In order to clarify some of the current changes and differences of opinion, I offer some of these observations. To form a basis of our understanding of the disease and the problem, the following is a quotation from the Michigan State Health Department*—"Tuberculosis is an airborne disease that is transmitted by droplet nuclei from one individual with 'open' pulmonary tuberculosis via coughing and sneezing to another individual usually after prolonged exposure. The tubercle bacillus is often inhaled by this individual and is implanted in the lung tissue. In some individuals the infection progresses rapidly to disease; however, most individuals have sufficient resistance to control the tuberculosis infection. In some cases, the germs remain alive and are capable of producing active disease at some later period in the person's life time."

Those who develop clinical evidence of the disease upon initial exposure, and this is more common in children, are referred to as having an "active primary infection." Those who overcome the original exposure without developing any clinical evidence of disease other than converting their tuberculin skin tests and then develop active pulmonary tuberculosis years later are referred to as "re-infection" or "adult" type tuberculosis. It is thought by many authorities that adult or reinfection type of disease is a late complication of the primary infection that had remained dormant in the interim, but harboring a potential active focus which under certain adverse circumstances reactivates to form clinical disease status.

It is on this concept that it was proposed that those persons exposed to tuberculosis sufficiently to develop a positive skin test be treated prophylactically with Isoniazid. It was proposed that the drug was sufficiently nontoxic to dispense for prophylactic treatment. It was theorized that this drug taken over a period of 12 or more months would be sufficient to inactivate the dormant foci and thus reduce the possibility of the disease reactivating at some later date.

With the advent of effective chemotherapy for active clinical tuberculosis, together with drugs for the prophylactic effect on the disease, there have evolved some new and conflicting concepts in the management of tuberculosis.

In 1970 a statement by the Committee on Bacteriologic Standards for the Discharge of Patients (from the hospital) was published under the title "Bacteriologic Standards for the Discharge of Patients."* The underlying premise of the report is based on large statistical data and applied to the individual case. The report repeatedly refers to patients as being "less infectious" and not "noninfectious." For example, "patients with negative

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*Tuberculosis Control in the 1970's, A Guide for Michigan—prepared and published by the Michigan Department of Health and Michigan Tuberculosis and Respiratory Disease Association, April, 1971.

*American Review of Respiratory Diseases, Volume 102, 1970, Page 470

The author is chief, Medical-Surgical Service, Traverse City State Hospital. At the time the article was written, he was medical director of the Tuberculosis Division, Genesee Memorial Hospital, and Trustee of the Genesee County TB and Respiratory Disease Association.

smear and positive culture were only SLIGHTLY more infectious for children than those whose specimens were negative on smear and culture." "... that untreated patients were GENERALLY more infectious than those who recently had been started on drugs. The exact effect of drug treatment was difficult to evaluate...." It is further stated that "the sum of this information leads to the conclusion that the risk of infection from patients on original treatment who are receiving adequate chemotherapy and who are excreting SMALL numbers of bacilli in their sputum is VERY SMALL."

Buried in the last paragraph of the four page report is the following statement, which has either been overlooked or minimized by some public health agencies: "The Committee recognizes that although the available evidence emphasizes the low degree of infectiousness of the individual on adequate chemotherapy who is excreting only small numbers of bacilli, THERE IS STILL NO SOLID EXPERIENCE IN THIS COUNTRY THAT PROVES THIS IS SO. In certain areas these recommendations probably can be implemented only in active opposition to public health officials, a position we do not wish to recommend since it is the health officer who has the responsibility for the control of tuberculosis in the community, not the physician who discharges the patient from the hospital. The important consideration at this time is not that these recommendations be carried out on a broad scale, but that a beginning be made if only on a limited scale ... these interim standards may need to be modified by further experience."

On the basis of the above committee report of bacteriologic standards, some public health agencies have urged that on the basis of the REDUCED degree of infection contrary to a NON-INFECTIOUS state, cases with positive sputum could be discharged from the hospital. Naturally, such discharged patients would not be confined to their home but would quite naturally mingle with the family, neighbors and the public.

The report of the *Tuberculosis Control in the 1970's, A Guide to Michigan,* stated that "the patient's bacteriologic status should not be the only consideration in determining length of stay in the hospital," and made no reference to his being negative or noninfectious as one of the criteria for his release from the hospital.

Some of the physicians who are directly responsible for the treatment of the patient and for his being noninfectious when returned to the public do not accept the moral or medical, or, for that matter, the medicolegal chance of the patient being "LESS INFECTIOUS" and "MAY" not transmit his disease to those with whom he comes in contact. Despite the statistical odds, (which may be acceptable for those not directly responsible for patient care) many physicians who do bear the responsibility cannot and will not accept the consequences of such chances.

We are all fortunate that our drugs and facilities for the diagnosis, the treatment, and the control of tuberculosis are now so effective. However, there still exist areas and conditions in this country and in other countries where tuberculosis remains a serious problem and so long as these pockets of communicable disease persist, everyone has a potential hazard of exposure. The long term improved social and economic conditions probably also play a role in our improved statistics and there is no real assurance that under unfortunate reversal of our current affluent environment, a further increase in the incidence of this disease may then take place.

Another changing concept has been that the treatment of active tuberculosis should be transferred from the old "sanatorium" type of hospital, generally located in a more remote area, to a division of a general hospital. This is now possible and practical since the length of stay has been reduced to a period of less than a month or to about an average of five or six months depending upon the area one services and one's criteria of discharge.

It should be emphasized that many publications have failed to point out that the recommendations to treat tuberculosis in a general hospital environment do not mean in any general hospital. It has been clearly stated that such care should be designated to one area of a specific hospital whose laboratory facilities are equipped and experienced in processing this more or less specialized field of bacteriology. Such units are also to be under the direction of physicians experienced and interested in the care of tuberculosis and it acknowledges that such physicians are generally in short supply. It is hoped that by treating tuberculosis in a general hospital environment it would not only make the treatment of tuberculosis part of the basic training of the intern and resident staff, but in so doing may stimulate more interest and responsibility in this subspecialty by those in the field of internal medicine.

One of the problems confronting the medical profession, the lay public, and the responsible public official is to avoid the temptation to grasp at what appears to be a happy and acceptable solution to a difficult and sacrificial type of problem. Progress continues to take place, but must be tempered with discretion and good scientific judgment and not ethereal hopes.

ALL IN HIS HEAD:
Watery Eyes
Nasal Congestion
Sneezing
Runny Nose
THE COLD SYMPTOMS THAT MAKE HIM MISERABLE
ALL IN 'ORNADE':
Drying Agent (isopropamide, as the iodide—2.5 mg.)
Decongestant (phenylpropanolamine HCl—50 mg.)
Antihistamine (chlorpheniramine maleate—8 mg.)
THE INGREDIENTS HE NEEDS FOR PROLONGED RELIEF

Before prescribing, see complete prescribing information in SK&F literature or *PDR*.

Indications: Upper respiratory congestion and hypersecretion associated with: the common cold; acute and chronic sinusitis; vasomotor rhinitis; allergic rhinitis (hay fever, "rose fever," etc.).

Contraindications: Hypersensitivity to any component; concurrent MAO inhibitor therapy; severe hypertension; bronchial asthma; coronary artery disease; stenosing peptic ulcer; pyloroduodenal or bladder neck obstruction. Children under 6.

Warnings: Advise vehicle or machine operators of possible drowsiness. Warn patients of possible additive effects with alcohol and other CNS depressants.

Usage in Pregnancy: In pregnancy, nursing mothers and women who might bear children, weigh potential benefits against hazards. Inhibition of lactation may occur.

Effect on PBI Determination and I^{131} Uptake: Isopropamide iodide may alter PBI test results and will suppress I^{131} uptake. Substitute thyroid tests unaffected by exogenous iodides.

Precautions: Use cautiously in persons with cardiovascular disease, glaucoma, prostatic hypertrophy, hyperthyroidism.

Adverse Reactions: Drowsiness, excessive dryness of nose, throat or mouth; nervousness; or insomnia. Also, nausea, vomiting, epigastric distress, diarrhea, rash, dizziness, weakness, chest tightness, angina pain, abdominal pain, irritability, palpitation, headache, incoordination, tremor, dysuria, difficulty in urination, thrombocytopenia, leukopenia, convulsions, hypertension, hypotension, anorexia, constipation, visual disturbances, iodine toxicity (acne, parotitis).

Supplied: Bottles of 50 capsules.

SK&F *Smith Kline & French Laboratories*

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ORNADE® SPANSULE®

brand of sustained release capsules

Each capsule contains 8 mg. of Teldrin®(brand of chlorpheniramine maleate); 50 mg. of phenylpropanolamine hydrochloride; 2.5 mg. of isopropamide, as the iodide.

UNCOMMON RELIEF FOR COLD SYMPTOMS

If you've seen one, have you really seen them all?

The following patient profiles represent typical clinical situations, but do not necessarily represent actual cases.

Age 21, short, mammose, with normal menses, some acne. Was put on prenuptial regimen of 50-mcg.-estrogen/moderate-progestogen O.C. for two months. Now has increased acne.

Indicates metabolic production of androgen or relative estrogen deficiency.

1st choice: Switch to a 100-mcg.-estrogen combination (such as **Enovid-E*** or a sequential).

Age 25, average frame, poor complexion. No problem with menses, normal para 1. On a low-estrogen/high-progestogen O.C. for two years. Now complains of scanty flow, decreased libido, depression.

Indicates probable buildup of progestogen-related side effects.

1st choice: Switch to a center-spectrum O.C. with more estrogen, less progestational activity (such as **Ovulen***).

Age 19, small breasts, minor hirsutism, oily hair and skin History of metrorrhagia, skipped or scanty menses. New user.

Indicates androgenic excess or estrogen deficiency (fertility is suspect)

1st choice: An estrogen-dominant O.C (such as **Enovid-E***).

Age 22, previously normal menses with occasional menorrhagia. Now on a sequential O.C. for four montl Complains of heavy flow, occasional intracyclic bleeding, edema, tender swollen breasts.

Indicates estrogen excess

1st choice: Switch to a combination 50-mcg.-estrogen O.C. (such as **Demulen***).

Unmasked, physiologically and anatomically, they're not all the same. A basic difference lies in their hormone profiles. One may secrete too much estrogen, another not enough...or perhaps too much androgen; the vast majority would fit somewhere into the broad center spectrum.

Although the profiles described below may not be completely predictive, in optimal O.C. selection, the estrogen-progestogen activity ratio should be carefully matched to the patient profile. Searle offers you O.C.s in a range not only suitable for your patients in the balanced center spectrum, but also adaptable to the patient with another type of hormone profile.

Oral contraceptives are complex medications. Among the commonly reported adverse reactions are: intracycle bleeding, fluid retention, tender or swollen breasts, exacerbation of acne condition, changes in libido, amenorrhea while on medication and upon discontinuance, nausea, leg cramps, headaches, weight gain. Therefore, after reference to the prescribing information, oral contraceptives should be prescribed with care.

*Note: In some patients any level of exogenous estrogen or progestogen may produce symptoms of excess hormone activity.

Age 25, tall, slender, athletic, with flat chest. On a progestogen-dominant 50-mcg.-estrogen O.C. Has recurrent trichomoniasis and Monilia.

Indicates estrogen deficiency and excess of progestogen in current O.C.

1st choice: Switch to a combination pill with 100 mcg. estrogen and less progestational activity (such as **Enovid-E*** or **Ovulen*** or a sequential).

Age 23, "Miss America" figure, previously normal menses, healthy skin and hair. On a 50-mcg.-estrogen pill for four months. Complains of intracyclic bleeding.

Indicates probable need for more estrogen.

1st choice: Switch to a center-spectrum O.C. with more estrogen and moderate progestogen dominance (such as **Ovulen***).

Age 21, college senior, average build. On highly progestogen-dominant/low-dose-estrogen O.C. for six months. Now complains of amenorrhea, between-cycle headaches, weight gain.

Indicates probable progestogen excess.

1st choice: Switch to a center-spectrum pill (such as **Ovulen***).

Age 27, slightly overweight, multiparous. Nausea with all three pregnancies and with a sequential O.C. three years ago. Has premenstrual fluid retention and leg cramps.

Indicates probable excess of estrogen.

1st choice: A 50-mcg.-estrogen/progestogen-dominant pill (such as **Demulen***).

Ovulen® a balanced center-spectrum O.C. for most

Each white tablet contains ethynodiol diacetate 1 mg./mestranol 0.1 mg.

Demulen® a moderately progestogen-dominant O.C. for many

Each white tablet contains ethynodiol diacetate 1 mg./ethinyl estradiol 50 mcg.

Each pink tablet in Ovulen-28® and Demulen®-28 is a placebo, containing no active ingredients.
Both Ovulen and Demulen are available in 21- and 28-pill schedules.

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Enovid-E® a moderately estrogen-dominant O.C. for some

Each tablet contains norethynodrel 2.5 mg./mestranol 0.1 mg.

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Where "The Pill" Began

or a brief summary
f prescribing information,
lease see next page.

a family of O.C. products to help you match the right pill to the right patient

Ovulen®

Each white tablet contains.
ethynodiol diacetate 1 mg./mestranol 0.1 mg.

Demulen®

Each white tablet contains
ethynodiol diacetate 1 mg./ethinyl estradiol 50 mcg.

Each pink tablet in Ovulen-28® and Demulen®-28 is a placebo, containing no active ingredients.

Actions—Ovulen and Demulen act to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Ovulen and Demulen depress the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Special note—Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision.

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication—Ovulen and Demulen are indicated for oral contraception.

Contraindications—Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia and undiagnosed abnormal genital bleeding.

Warnings—The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality conducted in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism, and cerebral thrombosis and embolism and the use of oral contraceptives. There have been three principal studies in Britain[1-3] leading to this conclusion, and one[4] in this country. The estimate of the relative risk of thromboembolism in the study by Vessey and Doll[3] was about sevenfold, while Sartwell and associates[4] in the United States found a relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions medication should be withdrawn.

Since the safety of Ovulen and Demulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Ovulen or Demulen. Therefore, if such tests are abnormal in a patient taking Ovulen or Demulen, it is recommended that they be repeated after the drug has been withdrawn for two months. Under the influence of progestogen-estrogen preparations preexisting uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Ovulen or Demulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Ovulen or Demulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Ovulen or Demulen may mask the onset of the climacteric. The pathologist should be advised of Ovulen or Demulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives—A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function: increased sulfobromophthalein retention and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T^3 uptake values; metyrapone test and pregnanediol determination.

References: 1. Royal College of General Practitioners: Oral Contraception and Thrombo-Embolic Disease, J. Coll. Gen. Pract. *13*:267-279 (May) 1967. **2.** Inman, W. H. W., and Vessey, M. P.: Investigation of Deaths from Pulmonary, Coronary, and Cerebral Thrombosis and Embolism in Women of Child-Bearing Age, Brit. Med. J. *2*:193-199 (April 27) 1968. **3.** Vessey, M. P., and Doll, R.: Investigation of Relation Between Use of Oral Contraceptives and Thromboembolic Disease. A Further Report, Brit. Med. J. *2*:651-657 (June 14) 1969. **4.** Sartwell, P. E., Masi, A. T.; Arthes, F. G., Greene, G. R., and Smith, H. E.: Thromboembolism and Oral Contraceptives: An Epidemiologic Case-Control Study, Amer. J. Epidem. *90*:365-380 (Nov.) 1969.

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Enovid-E®

norethynodrel 2.5 mg./mestranol 0.1 mg.

Actions—Enovid-E acts to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Enovid-E depresses the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Indication—Enovid-E is indicated for oral contraception.

The *Special Note, Contraindications, Warnings, Precautions* and *Adverse Reactions* listed above for Ovulen and Demulen are applicable to Enovid-E and should be observed when prescribing Enovid-E.

Enovid-E®
brand of norethynodrel with mestranol

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Where "The Pill" Began

272R

Doctor draft, cancer, alcoholism included in new federal legislation

By Herbert Mehler, Chief
Research and Analysis
Government Medical Care Programs

In the final week of the 1972 session, Congress enacted HR1 into law after extensive 11th hour compromises. President Nixon signed the omnibus Social Security-Medicaid-Medicare law October 30.

Among sections of the new law are the so-called "Bennett Amendment" requiring professional standards review, extension of Medicare services to thousands of new beneficiaries, incentives for health maintenance organizations, and other provisions of major significance to the practice of medicine. Following, in capsule form, are the major Medicare, Medicaid, and Maternal and Child Health provisions.

PSRO, Implementation and Enforcement

Professional Standards Review Organization (PSRO), representing a substantial proportion of practicing physicians, will assume responsibility in areas designated by HEW secretary by January 1, 1974 for comprehensive and ongoing review of services covered under Medicare and Medicaid.

Reviews will determine whether services provided were medically necessary, met appropriate professional standards and, whether inpatient services could be provided on an outpatient basis or more economically in a facility of a different type.

Only organizations representing a substantial proportion of physicians will be allowed to establish PSRO's until 1976.

After 1975 the HEW secretary may contract with other groups for performance of review functions, but he could enter such contracts only after finding that local professional groups were unable or unwilling to perform review functions.

PSRO's are initially limited to the review of health care provided by or in institutions, and shall assume review of other services only on the approval of the HEW Secretary.

Utilization Review Requirements Hospitals and ECF's participating in Medicaid or Title V (Crippled Children) programs shall submit to patient cases review by the same utilization review committee as is already reviewing Medicare. If one does not exist, review will be by a group meeting Medicare standards. Requirement may be waived if an alternate system is approved by HEW Secretary.

Unnecessary Admission Utilization committees are authorized to notify physician, patient and hospital that Medicare payment will cease in three days when it is found that hospital or extensive care stay is no longer necessary, and where admission was unnecessary.

Advance Approval of Extended Care and Home Health Coverage HEW secretary shall establish, by medical conditions and length of stay or number of benefits, periods for which a patient is presumed to be eligible for extended benefits and services.

Termination of Payments HEW secretary may terminate payments under programs to providers of health and medical services found guilty of fraudulent representation, excessive charges, furnishing services in excess of need, or of grossly inferior quality.

Incentives under Medicaid Federal matching funds for services in some facilities may be reduced for lack of proper utilization and medical review system.

Disclosure of Performance Information HEW secretary shall make public the following evaluation and reports: Individual contractor performance reviews and other formal evaluations of the performance of carriers, intermediaries, and state agencies, including reports of follow-up reviews; comparative evaluations of the performance of contractors; program validation survey reports, with names of individuals deleted. The subject party shall have suitable opportunity, not to exceed 60 days, to comment upon findings and conclusions.

Extension of Coverage and New Benefits

Disability Beneficiaries Medicare benefits extended to disabled receiving monthly cash benefits for at least 24 months under Social Security or Railroad Retirement programs; to disabled workers, disabled widows and widowers between age 50 and 65; to disabled persons 18 and older receiving Social Security benefits for disabilities occurring before age 22, and some others.

Uninsured Individuals Part A coverage under Medicare extended to individuals 65 and older not otherwise eligible, at varying premium costs initially set at $33 per month effective July, 1973. Individuals electing to buy into Part A must also have Part B supplementary coverage.

Physical Therapy Authorizes payment for services performed in therapist's office.

Colostomy Supplies Covers certain related supplies under Medicare.

Optometrists' Services under Medicaid States which previously have covered eye care services under Medicaid under physicians' services, may cover services of an optometrist licensed to perform such services.

Conditions of Coverage of Outpatient Speech Pathology Services Medicare Part B will include speech therapy under the care of a physician.

Chiropractic Services under Medicare HR1 includes as a "physician" a chiropractor licensed in his state and who meets federal standards, but only for treatment by manual manipulation of the spine to correct a subluxation demonstrated by X-ray to exist.

Chiropractic Services under Medicaid Michigan includes Chiropratic under Medicaid. Chiropractors will have to meet federal standards promulgated under Medicare.

Family Planning Services Mandatory under Medicaid Family Planning Services for present and former welfare patients of childbearing age and those persons likely to become welfare recipients are authorized by 90% funding for state programs. Programs would include both counseling and the provision of medical and social services.

Chronic Renal Disease Disability status under SSA is provided to individuals less than 65 and who are fully or currently insured under Social Security, or receiving cash benefits and their dependents, and who are medically determined to have such disease requiring hemodialysis or renal transplant.

New Service Methods

Payments to Health Maintenance Organizations Authorizes reimbursement, through a single capitation payment, to qualified HMO's offering either directly or under other arrangements, such Part A and B services as would otherwise be available in the area. Qualifications require at least 25,000 members, not more than half of whom are 65 or older, and in operation at least two years. As incentives, the organization will be entitled to half of the savings represented by the difference between actual costs and average per capita costs in the area for beneficiaries not enrolled in the HMO. Federal government will not share losses.

State Health Agency Functions Requires state health agency, or other appropriate state medical agency, be the certifying agency for health facilities participating in Medicare, Medicaid, and Maternal and Child Health Programs. Also requires state plans for review of appropriateness and quality of health care furnished under Medicaid and Crippled Children programs.

Skilled Nursing Facilities Eliminates separate requirements and certification procedures under Medicare and Medicaid for skilled nursing facilities; establishes a single set of requirements.

Intermediate Care Furnished in Mental and Tuberculosis Institutions When state chooses to cover individuals 65 or over it must cover such care in intermediary care facilities in hospitals and skilled nursing homes.

Cost Containment and Controls

Reasonable Cost of Inpatient Hospital Services Authorization under Medicaid and Title V (Crippled Children) is granted to states to determine reasonable costs in accordance with methods and standards developed by the state. Such costs shall not exceed reasonable costs under Medicare.

Payments Where Reasonable Cost Exceeds Customary Charges Reimbursement is limited to the lesser of 1) reasonable cost of such services under Medicare, or 2) customary charges to the general public for such services.

Demonstrations re Prospective Reimbursement, etc. HEW secretary is required to develop experimental demonstration projects to test methods of prospective payments under Medicare, Medicaid and Maternal and Child Health program, and to report to Congress by July 1, 1974. Additionally, secretary is authorized to experiment with reimbursement to ambulatory surgical centers; elimination of the three-day hospitalization requirement for extended care benefits; use of institutional and homemaker services as alternatives to post-hospital services; provision of day care services; and methods of paying physicians' assistants under Medicare.

Limitations on Costs under Medicare HEW secretary is authorized to establish prospective costs recognized as reasonable for certain classes of providers in various service areas. He may exclude costs of items or services in excess of, or more expensive than, those determined to be necessary in the efficient delivery of needed health services. Excessive costs may be charged directly to the beneficiary under certain conditions.

Limits on Prevailing Charge Levels Limits "reasonable" charges, so as not to exceed higher of the prevailing charge on December 31, 1970, or the prevailing charge level that, as determined by the secretary, would cover 75% of the customary charges made for similar services in the same locality in the base year preceding. For physician services, limitations are placed on future increases, subject to economic changes. Payments under Medicaid and Child Health Programs cannot exceed limits established under Medicare. Authorizes study of methods of reimbursements for physicians under Medicare to evaluate effects on physicians' fees generally, the extent of assignments accepted by physicians, and the share of total physician fee costs which the beneficiary must assume. Alternatives to the present methods will be studied.

Prohibition Against Reassignment This will be prohibited, thus limiting payment under Medicare and Medicaid generally to the patient, his physician, or another person providing service, except that direct payment could also be made to a foundation, association, plan or contractor providing and administering health care through an organized health care delivery system.

Laboratory Billing of Patients HEW secretary shall negotiate a payment rate acceptable for laboratory tests which payment will be considered full charge.

Recovery of Incorrect Payments Any over-payment discovered after three years will be without fault on the part of the provider and no collection shall be made. Additionally, HEW secretary is authorized to deny claims for reimbursement made after lapse of reasonable period of time (not less than one nor more than three years).

Cost-Sharing under Medicaid In states covering medically indigent, such individuals will be required to pay a premium, at graduated charges related to income. Additionally, at state's option, deductibles and co-payment amounts may be required.

Specialists invited to join Crippled Children's Program

". . . to assure that all children with handicaps, and those suspected of being handicapped, receive expert diagnostic services as early as possible and that those requiring treatment be referred to a proper source of care and rehabilitation services."

Thus is spelled out by statute the vital goal of the Crippled Children's Program, now an integral part of Medicaid.

It is administered by the Division of Services to Crippled Children (DSCC) of the Michigan Department of Public Health in conjunction with and funded by the Michigan Department of Social Services under Medicaid.

Physicians and other practitioners who are board approved specialists are invited by the division to enroll in the program. Because of regional need a few non-board certified physicians have been approved.

A wide variety of services are available to any medically and financially eligible child found in any county regardless of residence. Following are some general classifications of conditions usually considered crippling: orthopedic, plastic reconstruction, eye conditions leading to blindness or severe loss of visual acuity, ear conditions resulting in loss of hearing, rheumatic or congenital heart disease, blood dyscrasias and other metabolic or physiologic diseases which require specialized care.

Regional offices are located in Marquette, Lansing, Grand Rapids, Detroit and Pontiac. These offices assist the attending specialist and the family to obtain needed special services.

Physicians are invited to direct questions about services, fees, child eligibility, etc. to the nearest regional office or the Michigan Department of Public Health, Division of Maternal and Child Health, 3500 N. Logan Street, Lansing, Michigan.

Ampi
Beecham found it,
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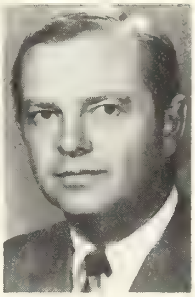
Rush

Five physicians named to deanships in WSU Medical School

Robert D. Coye, MD, dean of the Wayne State University School of Medicine, has appointed five men to serve as deans under him in leadership of the medical school.

He has promoted Lawrence M. Weiner, PhD, from associate dean for academic affairs to deputy dean of the Wayne State University School of Medicine. Doctor Weiner has been associate dean of the Medical School since 1970 and now will take on increased responsibility for planning and coordination of medical school operations.

Dean Coye has appointed L. M. Thomas, MD, as associate dean for hospital affairs. Doctor Thomas is chairman of the department of neurosurgery and will work to improve the relationship of the medical school with area hospitals.

Dean Coye has promoted Eberhard F. Mammen, MD, from director of admissions to assistant dean for admissions to handle the admitting, screening and selection process. WSU admitted the third largest medical school freshman class in the U.S. this year.

Also named as new assistant deans are James J. Horvath, MD, in charge of clinical faculty affairs, and William E. Rush, MD, area medical education. Doctor Rush will work to improve the quality of medical education and open new possibilities for cooperative training arrangements. Doctor Horvath is president of the WSU School of Medicine Alumni Association and chief of staff, Rehabilitation Institute of Detroit.

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Rudolf E. Nobel, M.D.
Gerard M. Schmit, M.D.
Joseph J. Tiziani, M.D.
Prehlad S. Vachher, M.D.
Richard D. Watkins, M.D.
Robert M. Zimmerman, M.D.

In small doses

Doctor Charles Stevenson now practicing in New Hampshire village

Charles S. Stevenson, MD, well known and loved Detroit obstetrician-gynecologist for nearly 25 years, retired Nov. 15. Doctor Stevenson has moved to Center Sandwich, N.H., because "some years ago I decided that at age 65 I would leave whatever big city I was living in, and go to live in the country, there to fulfill my lifelong ideal of ending up my professional years as a country doctor."

Doctor Stevenson was one of the three founders of the MSMS Maternal Death Study Committee in late 1949 and in 1962 became chairman of the committee (which became a subcommittee of the Maternal Health Committee in 1954).

He also leaves his membership in the MSMS Utilization Review and Health Insurance Problems Committee, and his professorship in obstetrics and gynecology at Wayne State University School of Medicine.

Doctor Stevenson was the first chairman of the WSU ob-gyn department, coming to Wayne from Boston in 1948.

"It has been very stimulating and rewarding to have been a Michigan physician (Michigan is the 'can do' state, you know) and my membership in the Michigan State Medical Society has always meant a great deal to me," wrote Doctor Stevenson in a letter to MSMS Oct. 26. "It is with considerable sadness that I must hereby tender my resignation from my beloved Michigan State Medical Society. I hate to think of leaving all my wonderful colleagues here, with whom it has been my privilege to work and live during the past quarter century."

John Anthony
director, MSMS Bureau of Economic Information, has been appointed to the Health Manpower Task Force which is helping the Michigan Department of Education and Michigan Department of Public Health develop a Health Manpower Information Retrieval System.

William B. Barr, MD,
is new chief of the Division of Medical Surveillance, Bureau of Health Care Administration, Michigan Department of Public Health. Doctor Barr obtained his MD degree from the University of Michigan and most recently served as chief administrative officer for the United States AID public health program serving sixteen provinces in Vietnam.

Ophelia Baker, MD, Sterling Heights,
is acting director of the Saginaw County Health Department, while Director Gotay takes a leave of absence to obtain his MPH degree.

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Harold E. Bowman, MD, Grand Rapids,
is new president-elect of the Michigan Division, American Cancer Society. He was elected in June.

Robert Bowsher, MD, Midland,
was guest of honor at a surprise dinner Oct. 18 honoring him for his accomplishments as director of medical education at Midland Hospital. The establishment of the Robert E. Bowsher Audio-Visual Medical Library at the hospital was announced at the dinner, with the support of the library coming from donations to the Robert E. Bowsher Fund.

Charles E. Farber, MD, Grand Rapids,
is the Family Physician of the Year, named by the Michigan Academy of Family Physicians at their recent annual meeting.

Stuart M. Finch, MD, Ann Arbor,
is new chairman of the State Mental Health Advisory Council. He was elected in September along with George Maniaci, MD, Gladstone, vice chairman.

Sidney Friedlaender, MD, Southfield,
has been appointed by the American Board of Internal Medicine to a six-year term as a director of the American Board of Allergy and Immunology. This new board is a joint effort of the American Boards of Internal Medicine and Pediatrics.

E. S. E. Hafez, MD, Detroit,
is the recipient of an honorary degree, a scroll and a silver medal from the University of Milano for his pioneer work in the physiology of sperm and the storage of fertilized ova. Doctor Hafez recently was appointed to the World Health Organization Task Force for the development of new contraceptives and he serves as a consultant in human reproduction to the UN Development Program. Doctor Hafez is professor of gynecology and obstetrics at Wayne State University School of Medicine.

Robert C. Horn, MD, Detroit,
is new president-elect of the College of American Pathologists. He is chairman of the Department of Pathology at Henry Ford Hospital, clinical professor at the University of Michigan and professor of pathology at Wayne State University.

Georgia Anna Johnson, MD, East Lansing,
assistant professor in the College of Human Medicine at Michigan State University, received the Distinguished Alumna Award of Western Michigan University in ceremonies recently.

William S. Jones, Sr., MD, Menominee,
ophthalmologist there since 1922, has been honored for his 50 years of practice with a long feature and picture in the Marinette *Eagle-Star.* In the article, Doctor Jones remarks that his greatest satisfaction has been the healing of patients and their return to him for treatment over the years.

Gerald O'Connor, MD, Ann Arbor,
chairman, MSMS Committee on Sports and Medicine, and team physician for the U-M Wolverines football team, spoke at the recent AMA National Conference on the Medical Aspects of Sports. He and representatives from Texas and California described the efforts of state medical societies and sports medicine.

Richard J. McMurray, MD, Flint,
is new president-elect of the Norman F. Miller Gynecologic Society, following the society's annual meeting Oct. 11-15 in Ann Arbor. Other officers include William C. Witting, MD, Ann Arbor, secretary; Edwin P. Peterson, Ann Arbor, treasurer, and Jan Schneider, MD, Ann Arbor, executive council member.

Sarah Schooten, MD, Detroit
who celebrated her 78th birthday Oct. 1, recently returned from Haiti where she participated in a massive immunization program conducted by the Brother's Brother Foundation. She joined one of four physician teams which began work in August to inoculate the Haitian people against diphtheria, polio, whooping cough and tetanus. It was Doctor Schooten's second trip with the foundation's inoculation program. In 1971, she traveled to Africa and early in 1973, she hopes to go to Guatemala to continue the Foundation's work. Doctor Schooten was one of six recipients of the MSMS Certificates of Commendation in 1970.

Robert Stow, MD, Lansing,
MSMS councilor, represented MSMS recently at MSU when the president of the Maine State Medical Society and other physicians and educators visited MSU College of Human Medicine as a possible model for a medical school in Maine.

Ezzatullah Safapour, MD, MPH,
is new director of the Kalamazoo County Health Department.

James Stanley, MD, Ann Arbor,
University of Michigan instructor in surgery, is the recipient of the first annual Jobst Award from the Frederick A. Coller Surgical Society for the best original work in vascular surgery by a surgical resident. The national award was made for his paper, "Fate of autogenous saphenous vein aorta-renal grafts."

Robert B. Sweet, MD, Ann Arbor,
is new president of the Frederick A. Coller Surgical Society. Doctor Sweet, chairman of the U-M Department of Anesthesiology, is the only anesthesiologist member of the national society, founded at the U-M in 1948.

WSU names architects for new Clinics Building

Architects have been nominated and plans approved for the administration of the Wayne State University Clinics Building, to be completed in 1977. The building will be constructed in the Detroit Medical Center and will serve as the outpatient service and education facility for the DMC. It will house the WSU School of Medicine's Department of Family and Community Medicine.

Doctor Beryl B. Spruce heads American Indian physicians organization

By Antoinette Raleigh
Special to Michigan Medicine

The first annual meeting of the Association of American Indian Physicians July 12-14 in Santa Fe was the realization of a dream for Beryl B. Spruce, MD, Ann Arbor.

Doctor Spruce, director of the Detroit Maternal and Infant Care Project, a clinical instructor at the University of Michigan and adjunct instructor at Wayne State University, is one of only two full-blooded Indian physicians in the nation.

He is one of the major organizers of the new association which comprises approximately 40 physicians of American Indian descent. Two of the members are full-blooded Indians, four are one-half Indian and the rest are a quarter or less.

The association recently received a $68,000 federal grant to actively recruit Indians into the medical profession.

The association plans to use a "buddy system" to contact future physicians whereby members will individually lend assistance, advice and friendship to an Indian anywhere in the nation who is contemplating a medical career. The association members will go to the prospective physician's home or school if necessary.

Doctor Spruce feels that the association members are important in serving as role models for Indian youths who can aspire to become Indian health professionals.

He himself is a Pueblo of the Tewa-Keres bands. He obtained his BS degree from Stanford University after working his way through college as an auto mechanic, farm hand, baker and cabinet maker. He even assisted a physician in performing autopsies.

"I never enjoyed one day of college, because of the social adjustment I had to make as an Indian," Doctor Spruce says.

Doctor Spruce says though he was "dumb, Indian and broke," he was determined to become a doctor. He received his MD in 1964 from the University of Southern California in Los Angeles, attended Philadelphia Einstein Medical Center as a rotating intern from 1964-65, served as a resident in obstetrics and gynecology from 1965-68 at Pennsylvania Hospital in Philadelphia, and then obtained his master's in public health from the U-M in 1969. "I'm proud that I survived," he now says.

His brother, George Blue Spruce, DDS, is the only full-blooded American Indian dentist in the US, and is director of the Office of Health Manpower Opportunity, Department of HEW, Washington, DC.

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Judicial commission serves MDs, county societies and the public

A laboratory in a southern Michigan county offers to provide laboratory services to physicians and pay them a fixed amount per patient. It advertises such a service in brochures mailed to the doctors.

Is this relationship between a firm and a physician ethical, the component medical society wanted to know. It addressed its query to the MSMS Judicial Commission, which made considerable study of the issue.

The commission ruled that this relationship would be unethical, and that such laboratories were, in effect, paying the doctor a finder's fee for their customers (patients).

The commission then directed its chairman, C. Allen Payne, MD, Grand Rapids, to consult with MSMS counsel about the legality of physicians associating with such groups as the laboratory. And the commission then informed the county medical society of its judgment.

In such manner, the 10-member MSMS Judicial Commission serves individual MSMS members, component medical societies and the public.

The commission meets about four times a year, and at each afternoon session, takes up an average of six topics.

Most of the commission's work comes from MSMS members asking whether an activity they are interested in would be ethical; or from component societies asking for advice in ethical questions regarding their members. Occasionally, a patient himself will appeal to the Judicial Commission after the local society has decided an issue against him.

For instance, at a typical meeting of the commission, these were the topics:

(1) possible guidelines for component societies in handling complaints against non-members;

(2) methods and guidelines for notifying the State Board of Registration in Medicine of the suspension or expulsion of a MSMS member;

(3) correspondence from that component medical society about the laboratory that will pay physicians a fixed amount per patient for each test performed;

(4) advertising in Michigan by New York abortion clinics;

(5) physicians contracting with other physicians to care for patients in coronary care units of hospitals, and

(6) a request from a Chicago health center for the ethics involved when physicians forward copies of patient records to an insurance company with the patient's approval.

The MSMS Judicial Commission has authority to make binding interpretations of the MSMS Constitution and Bylaws and of the component societies as they pertain to ethics, mediation, grievance and discipline and to make ethical interpretations and decisions. It has sole appellate powers at the state level. It has the power to entertain and exercise original jurisdiction over ethical and discipline matters, and to make and promulgate rules and regulations for all ethical procedures.

The commission's decisions are binding on MSMS members, but may be appealed to the appropriate agency of the AMA.

Members of the commission are Sherman E. Andrews, MD, Kalamazoo; Eugene L. Freitas, MD, Detroit; H. Maxwell Golden, MD, Huntington Woods; Robert H. Hamburg, MD, Detroit; Clarence S. Livingood, MD, Grosse Pointe; Robert J. Mason, MD, Birmingham; George Mogill, MD, Huntington Woods; Justin L. Sleight, MD, Lansing, and George M. Wilson, MD, Clinton.

Physician must prove each hospital visit on Medicare claims

Physicians submitting claims for hospital visits to Medicare patients should make sure that there is an entry on the hospital record for the patient substantiating the date of each visit.

That advice from the AMA is delivered by Chairman of the MSMS Delegation to the AMA Donald N. Sweeny, Jr., MD, Detroit.

Though the AMA has generally alerted its members to the advice, Doctor Sweeny emphasized that while Medicare carriers are not required to check hospital records before paying such claims, questions may be raised subsequently about the billed visits, perhaps as a result of a beneficiary's complaint or spotchecks by the carrier.

If a review of the hospital records shows a billed visit is not documented, Doctor Sweeny said, the burden of proof that such a visit was made rests on the physician.

A hospital rule that physicians are to visit their patients daily is not considered sufficient evidence that such a visit was in fact made, said Doctor Sweeny. Acceptable evidence is the physician's progress notes on the hospital record for the day of the visit, or nurse's notes indicating that he visited the patient on that day. The patient's statement that a visit was made is acceptable only if taken within a reasonable time after the visit; entries in the physician's own office records are not considered as strong evidence as the hospital record.

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Zina Pitcher, MD
1797 - 1872

Physician, military officer, tenth President of the American Medical Association, first president of the Wayne County Medical Society (1866), Mayor of Detroit (1840, 41 and 43), chief of staff of St. Mary's Hospital (1846-68).

By Alfred H. Whittaker, MD
Detroit

In *Doctors Under Three Flags*, Fannie Anderson has traced the medical history of Detroit and Michigan. She emphasizes the French and English influences and finally the arrival in Detroit of American-trained physicians, after the American flag was raised over the city in 1796.

The flag-raising ceremonies took place at what is now the corner of Washington Boulevard and Larned Streets, the site being marked by a plaque placed there by the Detroit Historical Society during the 250th Anniversary Celebration of the founding of Detroit.

Two outstanding doctors were among the earliest in Detroit. The first to arrive was William Beaumont, MD, who has received international acclaim for his treatment of the wounded Alexis St. Martin and his report of his "Experiments and Observations on the Gastric Juice and the Physiology of Digestion."

By contrast, Zina Pitcher, MD, the second of the great Michigan physicians of the nineteenth century, is scarcely remembered.

His portrait, which hung in the Old City Hall, is relegated to a storage room in the Detroit Historical Museum and the care of his grave, with its publicly erected monument in Elmwood Cemetery, has reverted to the cemetery trustees.

Few Michigan physicians are aware of his name and accomplishments, his interest in community affairs and his dedication to the care of his patients.

Doctor Pitcher, probably Detroit's most illustrious physician, was born in Washington County in the Sandy Hill area, now Hudson Falls, N.Y., on April 12, 1797. His death occurred on April 5, 1872, one hundred years ago.

To commemorate the centennial year of Doctor Pitcher's death, an exhibit was presented at the 1972 MSMS Annual Session this fall in Detroit. The exhibit included a bust 22 inches high sculpted by Alvah Bradish in 1859 and loaned by the Detroit Historical Museum, photographs of the doctor and of the monument in Elmwood Cemetery, and a biographical account of the doctor's career.

Doctor Pitcher was the descendant of a distinguished family. His older brother was governor of New York State.

Doctor Pitcher received the MD degree from Middlebury College, Vermont, and immediately after obtaining his diploma, was appointed assistant surgeon in the Army, by President Monroe. He held that position until 1830, when he was promoted to the rank of surgeon, by President Jackson. Doctor Pitcher's friend, General Cass, was then Secretary of War.

He then was stationed successively on the Northern lakes and to serve among the Choctaw, Creek and Cherokee Indians in the Arkansas Valley. Next he was detailed to Fortress Monroe, Virginia, and appointed a member of the Army Medical Board, of which he was made the presiding officer in 1835. He was the medical adviser and esteemed friend of President Jackson.

He was married in 1824, to Anna Sheldon of Kalamazoo County, and from that time on, his interest became identified with Michigan.

In 1836, Doctor Pitcher was appointed Regent of the State University (now The University of Michigan), and held the office continuously for 15 years. During that time, the university was organized and the medical department, through his efforts, was established on a firm basis.

In 1839 he served as a member of the Board of Visitors at West Point. He held the office of Mayor of Detroit in 1840, 1841 and 1843 and it was mainly due to his efforts that the public school system was established in the City of Detroit.

From 1848 to 1867, Doctor Pitcher served as physician at St. Mary's Hospital and also surgeon of the U.S. Marine Hospital at Detroit. In 1859 he was appointed Examiner of the Mint by President Buchanan.

Doctor Pitcher was elected 10th president of the AMA and contributed regularly to the medical journals. He was, for many years, an editor of the *Peninsula Journal*. He was elected an honorary member of the leading academies of science and medical societies of neighboring states.

Doctor Pitcher was an active member of the Territorial Medical Society, forerunner of the First Wayne County Medical Society, of which he was a founding member and trustee. He became its first president in 1866. In addition, he was a director of the Detroit Savings Fund Institute (now the Detroit Bank and Trust Company) and served as a trustee for the Kalamazoo Asylum, now the Kalamazoo State Hospital.

It is evident from this review of the career of Doctor Pitcher that he was a man among men, an ornament to the medical profession and that he contributed greatly to the prestige of Detroit in the fields of medicine and the sciences.

(Detailed historical references to Doctor Pitcher are available from Doctor Whittaker at 3 Elmsleigh Lane, Grosse Pointe, 48230.)

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In memoriam

Lester E. Bauer, MD
Detroit

Head of the obstetrics-gynecology department at Northwest Grace Hospital in Detroit, Lester E. Bauer, MD, died Sept. 19 at the age of 68. Doctor Bauer was a graduate of the University of Michigan Medical School and had been affiliated with The Grace Hospital since his internship and residency. He was a fellow of the American College of Surgeons.

Ralph S. Green, MD
Oak Park

Ralph S. Green, MD, Oak Park psychiatrist, died Oct. 4 at the age of 49.

Doctor Green was medical director of The Haven, a psychiatric hospital in Rochester, before entering private practice. He was a member of the MSMS Mental Health and Planning and Priorities Committees and served as consultant to the Oakland University psychology department.

Doctor Green was graduated from the University of Utah medical school and was past president of the Michigan Psychiatric Society, the National Association of Private Psychiatric Hospitals and the Central Neuro-Psychiatric Hospital Association.

Leslie V. Burkett, MD
Flint

Leslie Verne Burkett, MD, Flint physician for 35 years, died Oct. 20 at the age of 73.

Doctor Burkett had retired in 1966 after serving as health director of the Flint and Genesee County Health Departments, but continued his service as a regional health consultant for the Michigan Department of Public Health, serving health departments in eight counties until October, 1971.

A native of Ohio, Doctor Burkett received his MD degree from Ohio State University. He also held a degree in public health from Columbia University. Doctor Burkett was former director of school health services at Northern Illinois University, and health director of Midland County. He helped plan the establishment of Genesee Memorial Hospital and helped set up the system of medical examiners which was established in 1952 by the Michigan Legislature.

He was appointed in 1952 to the Michigan Advisory Hospital Council, serving until 1965, and was named Health Officer of the Year in 1962 by the Michigan Health Officers Association.

He was a charter member of the American College of Preventive Medicine and the American

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Academy of Public Health Physicians, and a member of the American and Michigan Public Health Associations. He was past president of the Michigan Health Officers Association and the Michigan School Health Officers Association.

Karm C. Kerwell, MD
Stephenson

Karm C. Kerwell, MD, long-time Stephenson family doctor, died Oct. 6 at the age of 83.

Doctor Kerwell, who began practice in Stephenson in 1919, received the MSMS 50-year award in ceremonies during the MSMS Annual Session in 1969. He was graduated from the University of Michigan School of Medicine in 1918 and also studied in Vienna. He was born in Lahore, India.

Doctor Kerwell served as medical officer for the Selective Service Board for 25 years. He was active with the Boy Scouts and received the Trail Blazer Award in 1960.

Roy A. Mitchell, MD
Trenton

Roy Alfred Mitchell, MD, Trenton, director of Mercy Hospital, Monroe, died June 22 at the age of 43.

Doctor Mitchell was a graduate of the Marquette University School of Medicine and had been on the staff of Detroit General and Detroit Memorial Hospitals before joining Monroe Mercy.

He was a member of the American College of Radiology.

Howard Park Porter, Jr., MD
Grand Rapids

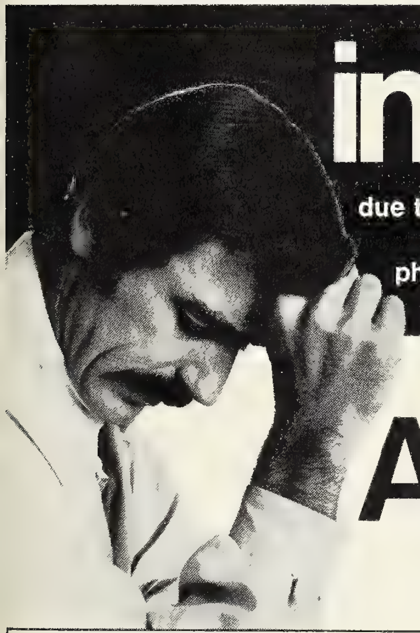
Howard P. Porter, Jr., MD, Grand Rapids surgeon and gynecologist, died Oct. 30 at the age of 51.

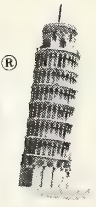
Doctor Porter had practiced in Grand Rapids since 1946 and was affiliated with Butterworth, Blodgett and St. Mary's hospitals there. He was a graduate of Marquette University School of Medicine and had served as a lieutenant in the U.S. Navy Medical Corps during World War II.

Floyd Westfall, MD
Ypsilanti

Floyd E. Westfall, MD, Ypsilanti physician for nearly 70 years, died Oct. 4 at the age of 96.

Doctor Westfall was graduated from the University of Michigan Medical School in 1899 and served as house doctor at University Hospital for three years. He established his practice in Ypsilanti in 1903 and had been semi-retired since 1966. He was a member of the Michigan Homeopathic Society.





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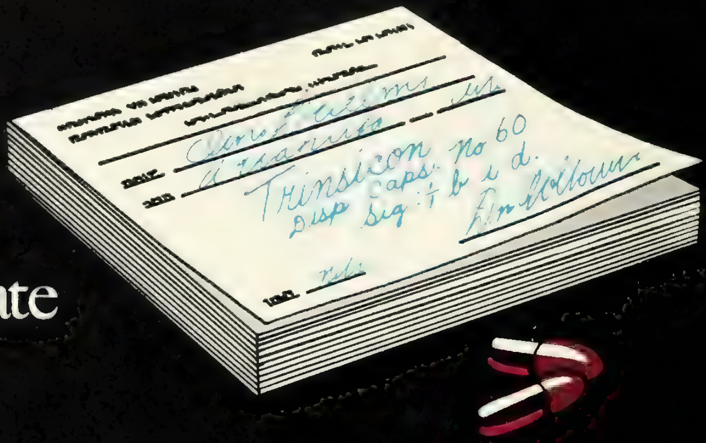
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Potency of intrinsic factor concentrates is determined physiologically, i.e., by their use in patients with pernicious anemia. The liver-stomach concentrate with intrinsic factor and the vitamin B_{12} contained in two Pulvules Trinsicon provide 1½ times the minimum amount of therapeutic agent which, when given daily in an uncomplicated case of pernicious anemia, will produce a satisfactory reticulocyte response and relief of anemia and symptoms.

Concentrates of intrinsic factor derived from hog gastric, pyloric, and duodenal mucosa have been used successfully in patients who lack intrinsic factor. For example, Fouts *et al.* maintained patients with pernicious anemia in clinical remission with oral therapy (liver extracts or intrinsic factor concentrate with vitamin B_{12}) for as long as twenty-nine years.

After total gastrectomy, Ficarra found multifactor preparations taken orally to be "just as effective in maintaining blood levels as any medication that has to be administered parenterally." His study was based on twenty-four patients who had survived for five years after total gastrectomy for cancer and who had been taking two Pulvules Trinsicon daily.

Folic Acid—Folic acid deficiency is the immediate cause of most, if not all, cases of nutritional megaloblastic anemia and of the megaloblastic anemias of pregnancy and infancy; usually, it is also at least partially responsible for the megaloblastic anemias of malabsorption syndromes, e.g., tropical and nontropical sprue.

It is apparent that in vitamin B_{12} deficiency (e.g., pernicious anemia), lack of this vitamin results in impaired utilization of folic acid. There are other evidences of the close folic acid-vitamin B_{12} interrelationship: (1) B_{12} influences the storage, absorption, and utilization of folic acid, and (2), as a deficiency of B_{12} progresses, the requirement for folic acid increases. However, folic acid does not change the requirement for vitamin B_{12}.

Iron—A very common anemia is that due to iron deficiency. In most cases, the response to iron salts is prompt, safe, and predictable. Within limits, the response is quicker and more certain to large doses of iron than to small doses.

Each Pulvule Trinsicon furnishes 110 mg. of elemental iron (as ferrous fumarate) to provide a maximum response.

Ascorbic Acid—Vitamin C plays a role in anemia therapy. It augments the conversion of folic acid to its active form, folinic acid. In addition, ascorbic acid promotes the reduction of ferric iron in food to the more readily absorbed ferrous form. Severe and prolonged vitamin C deficiency is associated with an anemia which is usually hypochromic but occasionally megaloblastic in type.

Contraindications and Precautions: Anemia is a manifestation that requires appropriate investigation to determine its cause or causes.

Folic acid *alone* is unwarranted in the treatment of pure vitamin-B_{12}-deficiency states, such as pernicious anemia. Indeed, the use of folic acid in large doses in pernicious anemia without adequate vitamin B_{12} may result in hematologic remission but neurological progression.

As with all preparations containing intrinsic factor, resistance may develop in some cases of pernicious anemia to the potentiation of absorption of physiological doses of vitamin B_{12}. If resistance occurs, parenteral therapy, or oral therapy with so-called massive doses of vitamin B_{12}, may be necessary for adequate treatment of the patient. No single regimen fits all cases, and the status of the patient observed in follow-up is the final criterion for adequacy of therapy. Periodic clinical and laboratory studies are considered essential and are recommended.

In extremely rare instances, skin rash suggesting allergy has been noted following the oral administration of liver-stomach material. Allergic sensitization has been reported following both oral and parenteral administration of folic acid.

Hemochromatosis and hemosiderosis are contraindications to iron therapy.

Adverse Reactions: In rare instances, iron in therapeutic doses produces gastrointestinal reactions, such as diarrhea or constipation. Reducing the dose and administering it with meals will minimize these effects in the iron-sensitive patient.

Dosage: One Pulvule twice a day. (Two Pulvules daily produce a standard response in the average uncomplicated case of pernicious anemia.)

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Sound Off

Informed, is not educated, consent

By Franz J. Ingelfinger, MD
Editor, **New England Journal of Medicine**

(This article is excerpted, with permission, from the Aug. 31 issue of The New England Journal of Medicine.*)*

The trouble with informed consent is that it is not educated consent. Let us assume that the experimental subject, whether a patient, a volunteer, or otherwise enlisted, is exposed to a completely honest array of factual detail. He is told of the medical uncertainty that exists and that must be resolved by research endeavors, of the time and discomfort involved, and of the tiny percentage risk of some serious consequences of the test procedure. He is also reassured of his rights and given a formal, quasi-legal statement to read. No exculpatory language is used. With his written signature, the subject then caps the transaction, and whether he sees himself as a heroic martyr for the sake of mankind, or as a reluctant guinea pig dragooned for the benefit of science, or whether, perhaps, he is merely bewildered, he obviously has given his "informed consent." Because established routines have been scrupulously observed, the doctor, the lawyer, and the ethicist are content.

But the chances are remote that the subject really understands what he has consented to—in the sense that the responsible medical investigator understands the goals, nature, and hazards of his study.

Nor can the information given to the experimental subject be in any sense totally complete. It would be impractical and probably unethical for the investigator to present the nearly endless list of all possible contingencies; in fact, he may not himself be aware of every untoward thing that might happen.

Ideally, the subject should give his consent freely, under no duress whatsoever. The facts are that some element of coercion is instrumental in any investigator-subject transaction. Volunteers for experiments will usually be influenced by hopes of obtaining better grades, earlier parole, more substantial egos, or just mundane cash. These pressures, however, are but fractional shadows of those enclosing the patient-subject. Incapacitated and hospitalized because of illness, frightened by strange and impersonal routines, and fearful for his health and perhaps life, he is far from exercising a free power of choice when the person to whom he anchors all his hopes asks, "Say, you wouldn't mind, would you, if you joined some of the other patients on this floor and helped us to carry out some very important research we are doing?" When "informed consent" is obtained, it is not the student, the destitute bum, or the prisoner to whom, by virtue of his condition, the thumb screws of coercion are most relentlessly applied; it is the most used and useful of all experimental subjects, the patient with disease.

When a man or woman agrees to act as an experimental subject, therefore, his or her consent is marked by neither adequate understanding nor total freedom of choice. The conditions of the agreement are a far cry from those visualized as ideal.

Thus, efforts to promote educated consent are in order. In view of the current emphasis on involving "the community" in such activities as regional planning, operation of clinics, and assignment of priorities, the general public and its political leaders are showing an increased awareness and understanding of medical affairs. But the orientation of this public interest in medicine is chiefly socioeconomic. Little has been done to give the public a basic understanding of medical research and its requirements not only for the people's money but also for their participation.

The procedure currently approved in the United States for enlisting human experimental subjects has one great virtue: patient-subjects are put on notice that their management is in part at least an experiment. The deceptions of the past are no longer tolerated. Beyond this accomplishment, however, the process of obtaining "informed consent," with all its regulations and conditions, is no more than an elaborate ritual, a device that, when the subject is uneducated and uncomprehending, confers no more than the semblance of propriety on human experimentation. The subject's only real protection, the public as well as the medical profession must recognize, depends on the conscience and compassion of the investigator and his peers.

Physicians should know what patient is billed

(This article is reprinted, with permission, from the September issue of the ***Massachusetts Physician.****)*

"Since the physician and hospital are interdependent, it is incumbent on both to be interested in all phases of their scientific and financial relationship." In 1951 the House of Delegates of the

American Medical Association approved a report containing this statement. Most MDs are not overly concerned with the economic aspects of medical care. They are principally involved in giving their patients the best care their knowledge and skill permits irrespective of their patients' financial status. This is how it should be. At the same time, hospital costs and medical care expenses are at an all-time high. How much the patient has to pay should never affect the excellence of his care, how he is treated or how many tests or specialized procedures he should receive. Nevertheless, it would certainly be to the patient's benefit if the physician took some interest in the patient's hospital expenses. This also involves the financial problems of running a hospital, providing a battery of laboratory tests and any other expensive procedures. If nothing else, it would make him more tolerant when a hospital administrator tells him the hospital cannot buy the new equipment he wants because the hospital cannot afford it.

A Sioux Falls, South Dakota, hospital has been sending copies of patients' hospital bills to their attending physicians. Over a nine-month period, the hospital selected one patient a week on a random basis for each MD and sent the physician a computer-printout copy of the bill. This acquainted the MD with the actual cost of tests and other procedures that he had ordered.

Although some physicians would simply "round file" any such copy of a bill, some would be interested in learning how the decisions affect a patient's finances. *Massachusetts Physician* thinks that any MD so inclined should be in a position to automatically receive a copy of his patients' bills, if he wishes to do so. It could be sent to him when the bill is sent to the patient. Even if he only looked at one a week, it would let the MD know how much cold cash must be laid out for a given test or treatment. Some MDs forget that the payor is either the patient's insurance company or the taxpayer. MDs have a direct concern regardless of who pays the bill.

200 Conferees urged to rehabilitate drug, alcohol abusers

Physicians and other leaders in community programs to combat drug and alcohol abuse should direct efforts toward help and rehabilitation rather than toward punishment.

This was the concensus among speakers and conferees at the Michigan Workshop on Alcoholism and Drug Abuse held recently in the Kellogg Center in East Lansing under sponsorship of MSMS, the Michigan Office of Drug Abuse and Alcoholism and 25 other state-wide organizations.

Richard C. Bates, MD, of Lansing, chairman of the MSMS Committee on Alcohol and Drug Dependency, gave the opening keynote address and challenged the 200 physicians, educators, social workers, law enforcement officers and administrators present to aid drug victims, even those who harm only themselves.

"Drug abuse is a preventable, contagious, treatable, life-threatening disease of human behavior," he said. "The best approach to this problem is coordinated, multi-disciplined, action from many, varied organizations concerted in their objectives, but varied in their methods.

"We have proven with alcoholics that a coordinated system of loving discipline can keep 70 per cent sober," he said. "Hopefully, the same systems can be adapted to abusers of other drugs."

Gov. William G. Milliken and Judge George Bashara of Wayne County Probate Court also addressed the workshop.

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Doctor Kernodle lists 7 major plans for the AMA

Seven goals for the AMA have been suggested by J. R. Kernodle, MD, new chairman of the AMA Board of Trustees. In a feature article in *American Medical News,* Doctor Kernodle outlines plans:

1. to continue to be the prominent organization serving all physicians, whether they are in government, in research, or in the private practice of medicine;
2. to maintain the concept of the private practice of medicine while recognizing that an increasing number of physicians are choosing to practice under some form of contract;
3. to act as a catalyst in applying the use of computers to medicine;
4. to review stance on national health insurance and come forth with a position reflecting the AMA's policies, (We will support Medicaid credit until we recognize necessary changes.);
5. to encourage innovative ideas for improving the access to the health system, believing that the need for better medical manpower distribution may be greater than the need for more numbers of people;
6. to establish policies within the next year or so to improve the quality of our scientific journals, and
7. to improve both the AMA internal and external communications.

Highlight of the opening day's activities at the Michigan Workshop on Alcoholism and Drug Abuse was the noon keynote address by Governor William G. Milliken. Other important persons on the program were, center, Richard C. Bates, MD, Lansing, head of the Alcoholism Treatment Center at E. W. Sparrow Hospital, and C. Patrick Babcock, right, director of the Governor's Office of Drug Abuse and Alcoholism.

One of the workshop speakers was Leonard Demak, MD, director of the Detroit project, Drug Abuse Reduction Through Education. He visited during luncheon with Alvin DeGrow, of Pigeon, member of the Michigan Senate.

Many physicians were attracted to the two-day workshop at Kellogg Center, Michigan State University. They included, from left, F. L. Purcell, MD, Ypsilanti, president of the Washtenaw Council on Alcoholism; Martin Sharda, MD, Grand Rapids, affiliated with the Kent County Sheriff's Department, and right, Walter D. Meester, MD, member of the Kent County Medical Society Committee on Drug Dependence and Alcoholism, and affiliated with Grand Rapids' Project Rehab for drug addicts. Second from right is Howard B. Huisman, Ph.D., chemist with Blodgett Memorial Hospital and also affiliated with Project Rehab.

Government's financial obligation to hospitals

Michigan Hospital Association Position Statement

The Michigan Hospital Association believes the best interests of all citizens will be served when the State of Michigan adopts a rate of reimbursement to hospitals that meets the full cost* for the hospital care of sick and injured patients whose hospitalization is the responsibility of government.

The Social Security Amendments of 1972 *now* allow the State of Michigan to develop a plan of reimbursement for hospital service under Medicaid which will include the full cost of all customary general hospital services. The new plan can include psychiatric care, occupational therapy and medical social service—examples of important hospital services not reimbursed at present by Medicaid in Michigan.

The Michigan Department of Social Services in cooperation with the Michigan Hospital Association will instruct hospital personnel concerning requirements for Medicaid reimbursement which will ease the administrative burden on hospitals. The Michigan Hospital Association acknowledges with gratitude this team effort by the Department to help achieve a program to reduce or minimize administrative expense to the hospitals.

Adequate cash flow is as necessary for hospitals as for any business or industry. The Department of Social Services believes its design for a State administered Medicaid program (welcomed by the hospital industry) will permit it to alleviate the serious current cash flow problem faced by hospitals due to slow payment to hospitals for services rendered Medicaid patients.

Aggressive attention by the Michigan Department of Social Services will help to eliminate the long delays in determining a patient's eligibility under government financed hospitalization programs. Loss to hospitals occurs when service is rendered before patient eligibility has been established or when there are gaps in eligibility between benefits.

The public is concerned with the high cost of hospital care. Hospitals are even more concerned since much of the increase in cost is beyond the ability of hospitals to control. Much of the increase in hospital cost is due to government imposed requirements such as the minimum wage and contributions to the cost of Social Security, Workmen's Compensation, and Unemployment Compensation. Requirements for hospital licensure by the Health Department, the Fire Marshal, and Board of Pharmacy and other units of government, help to set a high standard of safety and performance but are inflationary in effect and add nothing to productivity or efficiency of hospital operation.

The ability of hospitals to deliver patient services depends on adequate financing. Government hospitalization programs desirable for the public welfare must pay their full share of the financial needs of hospitals. The fact is that costs of patients who are the responsibility of government, *but not fully reimbursed*, must be charged to other patients at the time when they can least afford an additional drain on their resources.

The Michigan Hospital Association seeks to encourage understanding at all levels of government and by the public of the financial burdens faced by hospitals, many of which are the result of government regulations. The Association urgently requests the Governor of the State of Michigan, William G. Milliken, to take necessary action to correct deficiencies in payment to hospitals to insure that hospitals are paid at a rate adequate to meet the full financial requirements for services to patients who are, under law, the responsibility of government.

**To be equitable, reimbursement must meet the full cost of each patient in the total financial requirements of hospitals. The Michigan Statement on the Financial Requirements of Health Care Institutions and Services adopted by the Michigan Hospital Association House of Delegates in 1969 contains sound guidelines for reimbursement of the necessary component costs of providing hospital services.*

MEDIGRAMS

JAN 22 1973

LATE NEWS FROM THE MICHIGAN STATE MEDICAL SOCIETY

Michigan Medicine

December 27, 1972, Volume 71, Number 36
Michigan State Medical Society
Reading Time: 2 min. 30 seconds

TENTATIVE MODIFICATIONS IN THE MEDICAID Practitioners Invoice form will be presented by the State Department of Social Services to MSMS for review. That was one of the decisions reached Dec. 14 when MSMS special Liaison Committee conferred again with the Governor's special Liaison Committee. MSMS representatives stressed the unhappiness of physician-members with the current Medicaid invoice.

State representatives assured MSMS that efforts have been increased to mail invoice forms to physicians who have sent in the new Physician Identification Form.

The MSMS Committee will report details of the liaison session to the next MSMS Council meeting.

Phase-in modifications of the Medicaid program were discussed at the four-hour session between the MSMS Liaison Committee and the Governor's Liaison Committee. Issues explored were (1) how to determine true emergency treatment by non-enrolled providers, (2) coverage for outpatient psychiatric care (which has since been resolved by legislation), (3) coverage for newborn infants until they are enrolled as Medicaid-eligible recipients, (4) alternative approaches to determination of fees, and (5) continuing liaison. Present from MSMS were Doctors James Fryfogle, Brock Brush, Paul T. Lahti, David Siegel and Robert Toteff plus staff, and from the Governor's Committee, John Dempsey, PhD, personal representative of Governor Milliken; Donald Smith, MD, director, Office of Medical and Health Affairs; Bernard Houston, director, Department of Social Services; Maurice Reizen, MD, director, Department of Public Health and staff members.

TWO NEW MEMBERS OF THE MSMS JUDICIAL COMMISSION were elected in the recent balloting by MSMS members. The new representative for District Six will be William C. Baum, MD, Holland, and the new member from District Four will be John W. Grigg, MD, Bay City. Clarence S. Livingood, MD, Grosse Pointe, was re-elected by District One. The terms are for three years.

PHYSICIANS WISHING TO OBJECT to the slanted viewpoint of the NBC television special, "What Price Health Care" on Dec. 19 are urged by MSMS to do so by writing to the manager of their NBC-TV station. MSMS immediately sent letters of protest to the seven NBC-TV stations in Michigan. MSMS also sent a "call for action" to leaders of the component medical societies and specialty organizations. The AMA has filed a complaint with the Federal Communications Commission and NBC. AMA Board Chairman Kernodle said the "disgracefully slanted NBC presentation . . . dramatizes the need for strong leadership for collective action through our local, state and national organizations."

ROBERT RICE, MD, CHAIRMAN of the Committee on Governmental Medical Care Programs, led a study group on PSRO legislation to Washington Dec. 17 and 18. With the chairman were Doctors John Wilson, Grand Rapids, and Kenneth Ray, Grosse Ile, and staff. The physicians met with the AMA Washington staff and HEW health office staff. The three doctors then met Dec. 20 with the full MSMS Committee to prepare recommendations for the Council meeting Jan. 31.

MSMS REPRESENTATIVES PARTICIPATED Dec. 15 in a meeting called by Michigan Blue Shield in Detroit to study problems in reimbursement for laboratory services. The MSMS Council in November adopted a resolution requesting Shield to declare a 90-day moratorium on its new method of reimbursement for lab services and to involve provider groups in a study of the matter. In response to the MSMS letter, Shield did declare a moratorium, and subsequently representatives were brought together. MSMS was represented by William A. DeYoung, MD, MSMS Councilor from Saginaw; Dale L. Kessler, MD, chairman of the MSMS Committee on Medical Socio-Economics, and John Anthony, chief of the MSMS Bureau of Economic Information. Shield is conducting a survey now toward formation of a new decision.

PHYSICIAN ASSISTANT LEGISLATION, sought by MSMS, was adopted by the state Legislature in its final week. MSMS-supported Substitute House Bill 4056, introduced by Rep. Jackie Vaughn, which passed the Senate 27-10 two weeks after the Senate had first rejected it. The bill now goes to the Governor for signature. The bill would create a commission within the Department of Public Health to define quality criteria for training, experience and education for physician assistants in Michigan. Meanwhile, the legislation provides protection to both the physician employing a PA and to the PA. Under the pending statute, physicians may delegate selected tasks and acts to physician assistants under the doctor's direction and control.

ANOTHER PIECE OF LEGISLATION passed in the final days brings Michigan's Medicaid program into compliance with several specifics of federal statute. As a result, the programmed-but-pending early diagnostic and screening project of the Department of Public Health for Medicaid-eligible minors will be implemented, and Medicaid coverage will be extended to outpatient psychiatric service. Both programs will take some time to be activated, according to state spokesmen.

ANOTHER MSMS-SUPPORTED BILL was approved the final day to reduce from 5 years to 2 years the required length of practice in another state before reciprocity can be based on the subjective decision of the Board of Registration in Medicine. The bill was a special-interest bill to help an Indiana physician who hopes to establish practice in Ottawa County. Chief sponsors were Sen. Gary Byker and Rep. Melvin DeStigter.

THE UPDATED, REVISED MICHIGAN RVS was recently mailed to every MSMS member by the Bureau of Economic Information. MSMS officers urge that members save and use the publication.

WATCH FOR MSMS DIRECTORY in January. It will contain one complete alphabetical listing of all 8,000-plus members.

December 27, 1972 Vol. 71, No. 36

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Michigan
Medicine

MICHIGAN STATE MEDICAL SOCIETY

Published three times each month and four times in December and January, 38 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Mich. and at additional mailing offices. Yearly subscription rate, $9.00. Printed in USA. All communications should be addressed to the Publications Committee, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. © 1972 Michigan State Medical Society. Phone: Area Code 517, 337-1351.

EDITOR: HERBERT A. AUER

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MEDIGRAMS

LATE NEWS FROM THE MICHIGAN STATE MEDICAL SOCIETY

- READ BACK PAGE FIRST ABOUT THIS SURVEY
- FILL IN AND MAIL TODAY TO MSMS

Michigan Medicine

December 29, 1972, Volume 71, Number 37
Michigan State Medical Society

DOCTOR, FILL IN PLEASE AND MAIL TODAY TO MSMS (Read Back Page for details, etc.)

MSMS PROFESSIONAL LIABILITY INSURANCE SURVEY

NO NAME REQUESTED. Year of Birth ______ If No Liability Insurance ____

Professional Liability Limits Carried ________________ (100/300, 200/600, etc.)

Name of Insurance Carrier ______________________ Month Coverage Expires ___________

Medical Specialty Class for Insurance Underwriting (Circle One) I II III IV or V

Area Code for Practice ____Zone I (Wayne, Oakland, Genesee) ____Zone II (Bal. of State)

1972 Annual Premium $______________ (Basic Professional Liability Coverage Only)

Excess Liability Coverage Carried? ___ Yes ___ No If Yes, Maximum Amount $__________

Type of Practice ___Solo ___Solo P.C. ___Group ___Group P.C.

___Hospital Other __________________________

REPORT OF PROFESSIONAL LIABILITY CLAIMS INCIDENTS

IF NONE SINCE JAN. 1, 1968, please check: ____None
IF ANY ALLEGATIONS SINCE JAN. 1, 1968, please fill in below. This is confidential for MSMS office use only. Fill in separate form for each incident please.

Date alleged incident occurred ________________________, 19_______

Name of Insurance Carrier(s) ______________________________________

Additional Defendants __________________________(i.e. hospital, P.C., other doctor, etc.)

Disposition of Claim ___Open: Has Carrier suggested a settlement? ___Yes ___No

___Closed: Amount of settlement or award $_____________(if any)

Date Closed: _________________ Out of Court ___

Court Decision ___

Brief description of occurrence (include allegations made, your relationship to case, etc.) ____

____

Return this form in an envelope to the MSMS Bureau of Economic Information, Box 950,
East Lansing, Mi 48823

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DOCTOR, PLEASE FILL IN THE SURVEY FORM ON OTHER SIDE . . .
MSMS NEEDS THIS INFORMATION TO CONTINUE EFFORTS TO IMPROVE MALPRACTICE SITUATION

The MSMS Council urges your cooperation in the survey (on other side of this Medigram) as part of The Council investigation to explore the possibilities of a MSMS-sponsored professional liability insurance program. An insurance consultant firm has asked for valid statistical data on premiums and claims to help it in efforts to develop a proposal for The Council.

Please fill in the form, put it in an envelope and fire it off to MSMS. Urge your fellow colleagues to do the same.

This Medigram is being used for this survey because we hope to use this approach for other surveys, questionnaires, etc., since it is economical and we hope effective.

A REQUEST FOR MSMS approval of a proposed 6-year master's degree program i
medical biology was presented by the Saginaw Valley State College to the M
Council at its December meeting. The Council referred the matter to the J
11 meeting of the MSMS Education Liaison Committee for its evaluation.

PHYSICIANS WHO HAVEN'T INCREASED their fees since Jan. 1, 1971, may be eligible to raise them by a cumulative 5%, effective Jan. 1. Physicians are permitted to increase fees 2.5% annually without seeking prior approval by the IRS, but must be prepared to justify the increase. Physicians cannot increase their profit margin above the base period. Base period profit margin is defined as any two of a physician's past three fiscal years ending before Aug. 15, 1971. Profit margin is defined as the ratio of net profit, before taxes, to total revenue. Those physicians who feel that they have suffered a gross inequity or serious hardship may apply for an exception to the regulations. They should use forms S-16 and S-53 for this purpose. The forms may be obtained from the IRS district director. MSMS members desiring assistance may call the MSMS Bureau of Economic Information. Call 517/337-1351 and ask for Mr. John Anthony.

ATTORNEY GENERAL Frank J. Kelley recently ruled that the requirement that
applicant for a license to practice medicine be a citizen of the U.S. or h
proof of valid second naturalization papers is unconstitutional. In part,
pointed out that if an alien meets all the requirements pertaining to educ
tion and practice, there would be "no rational basis for distinguishing
between citizens and aliens."

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